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THE JOURNAL OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND

VOL. 86

1925

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THE EVOLUTION OF THE DAIRY COW AS I HAVE KNOWN IT

It is somewhere about thirty-seven years ago that I went with the late Mr. Salisbury Baxendale and Mr. John Frederick Hall—two well-known breeders of Jersey cattle—to discuss with a Committee of the British Dairy Farmers Association the advisability of carrying out Butter Test Competitions at the London Dairy Show with "scalded" cream instead of with cream obtained through the then comparatively new mechanical cream separator; it being the contention of the Jersey breeders that more reliable results were obtained when "scalded" cream was used. Times have altered since then and the separator, which in those days made a horrible noise, now runs so quietly and does its work so well that without it it would now be almost impossible to get through the big butter test trials that are undertaken at the Royal Agricultural and the London Dairy Shows. This was my introduction to experimental work in connection with the Butter Test trials, but as the "Evolution of the Dairy Cow" is the limiting factor of this article I propose to put on one side the semi-scientific work connected with them and to confine my remarks to the improvement that I have observed in Pedigree Dairy Cattle in this country, largely attributable to these two trials.

For similar reasons I pass over the position at that time of the Milk Industry and of the difficulties connected with it—suffice it to say that "Beef" rather than "Milk" was the desideratum of the breeders of pedigree stock, and that it has taken many years to get the type and general appearance of the Dairy Cow recognised.

To show how great has been the increase in the number of Herd Book Societies I give the number of the Pedigree Breeds of cattle exhibited at the Derby "Royal" Show in 1881—the year in which I became a member of the Society—and of those represented at Chester last July, feeling sure that the figures will come as a surprise to many. At Derby, the following eight breeds of cattle were present—Shorthorns, Herefords, Devons, Sussex, Longhorns, Jerseys, Guernseys and Norfolk and Suffolk Polled, while at Chester no fewer than twenty-two breeds of pedigree cattle were exhibited, to twelve of which milk-yield prizes were offered. It is only fair to the "Royal" to mention that at Derby prizes were offered for Dairy Cows of any breed or cross, but as there were only four entries for the three classes, and one of these was not forthcoming owing to an accident on the railway, the actual number of exhibits was reduced to three, which would look as if the "Milk Cow" was not a good type of animal, and that the specimens from non-pedigree herds were capable of improvement.

There had, however, been a good deal of pioneer work at that time, the Agricultural Hall Auctioneer and Agency Co. having started a Show and Auction at Islington some four years before this. Their successor, the British Dairy Farmers' Association, held a Show at Islington in 1879, where apparently for the first time prizes were given to cows for their milk yields, quantity alone being taken into consideration in making the awards. This raised a protest from a competitor who wrote that "simply measuring or weighing the quantity of milk irrespective of its quality or the time that had elapsed since calving do not seem to me to be calculated to ensure the prizes being given to the most deserving animals."[1]

This protest was evidently favourably considered, as alterations in the conditions of the Dairy Show schedule covering the two points raised were soon noticeable, which have made the milk yield trials of the Association models of what such contests should be.

I think it will be admitted by all that the credit of first calling attention to the usefulness and importance of these trials belongs rightly to the British Dairy Farmers' Association, and further that with their inception began the improvement of Dairy Cattle in every way.

Perhaps the next most notable contributory cause was the introduction of milk recording, of which so much is now made, and this was attributable to the keenness of breeders of Jersey cattle. A few words explaining how milk records came into favour are perhaps necessary. Jerseys were first imported into England in 1811, and by 1881 were fairly well known in the southern parts of the country, where they were generally described by the farming community as the "gentleman's cows."

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[1] *Journal of the B.D.F.A.* Vol. 36, p. 17.

Whether to get over this term of reproach or to show the value of Jersey milk for making butter, milk records began to be kept by several breeders, the value and weight of the butter made rather than the quantity of milk being apparently the object aimed at.

The first published records were those from Lord Braybrooke's herd at Audley End, which were begun in 1880, the figures being published in the third volume of the *English Jersey Herd Book.* Other notable breeders who kept similar records were Mr. Champion, of Hassocks; Mr. George Palmer, of Reading; and Mr. Swan, of Lincoln. But to Mr. John Frederick Hall belongs the credit of having been the first research worker on the value of milk for butter making, and his useful and elaborate statements and figures were also published in the *Jersey Herd Books.* As a result of his work, the English Jersey Society offered Butter Test prizes for competition at the British Dairy Farmers' Association's Shows, the first trial taking place in 1886.

There were, however, differences between the prizes given by the Dairy Farmers Association and those offered by the Jersey Society, which for a time rather militated against their success. The prizes given by the Dairy Farmers were for milk alone, and pedigree was not an essential. Indeed, the breeds competed more or less against one another, while, on the other hand, the Jersey Society's prizes were offered for Pedigree Jerseys only, no other breeds being allowed to compete for them.

The activities of the Jersey Society did not end here, for they gave their medals for Butter Test prizes to several other Societies; notably to the Bath and West of England, the Royal Counties, the Tunbridge Wells, the Essex and, later on, to the Royal Jersey Society at its Spring Show at St. Heliers.

These Societies, in many cases, supplemented the prizes given by the Jersey Society with milk yield prizes open to any breed or cross, but not being limited to pedigree cattle the information derivable from them was not of much value.

In 1890 the Jersey Society held a show of its own at Kempton Park for Jerseys only, which introduced a condition quite new, although it turned out to be useless at that time. It was "that a certificate declaring all the food used for a fortnight before and during the Show must be given to the Society." I do not think it is necessary for me to say why this condition was never again inserted in the Schedule of any Society, as it will be patent that the difficulties in getting it carried out were most formidable. A forward movement, however, in another detail, took place in 1892, when at the Tring Show, for the first time, the weights of all the competing cattle were taken, and a division into two classes was made, based on weight, 900 lb. being the dividing figure.

In that year the late Lord Rothschild offered for the first time £200 for prizes for Milk Yield and Butter Test Trials, with one new condition, namely, that all the cattle must compete for both sets of prizes. This was gladly accepted by the Tring Society and these Trials were continued for twenty-one years until stopped by the war in 1915. They did more than any other competition in calling the attention of the farmers to the possibilities of improving the milking value of their stock by the use of bulls descended from good milking dams and by the keeping of milk records. During the whole of the time that these trials were carried on, all the expenses connected with them as well as the amount of the prize monies were most generously borne by Lord Rothschild.

In 1898 a further step forward was taken in that the prizes in all these trials were awarded on a scale of points. Up to that time they had been awarded to those animals which gave the greatest weight of milk in the milk yield classes and to the cows in the butter test classes whose milk produced the largest quantity of butter, but under the new system the points given took account of the length of time an animal had been in milk. These lactation points were subsequently altered, fresh conditions being imposed with the one object of making sure that the cows were breeding regularly; in other words, that they were having a calf in each year of twelve months, which, in my opinion, is the only way to ensure that the competitions for these prizes are fair.

In 1904, milk yield and butter test prizes were included in the Royal Agricultural Society's Schedule, and except when stopped by the war or by "Foot and Mouth" they have formed part of the programme ever since.

These prizes were given to each dairy breed of cattle, which avoided "the battle of the breeds" and caused an increase in the number of the various general milk yield classes.

They were undoubtedly the most important trials that had taken place up to that time because, as a condition precedent to the entry of stock, all animals competing had to be entered, or eligible for entry, in their respective herd books, and as a result, the standard of cattle exhibited showed at once a marked improvement in character and type.

The Butter test prizes were open to all breeds of cattle in two sections—those of 900 lb. weight and under and those over 900 lb.—but the records of each breed were kept apart and the average points were always included in the report of the "Steward of Dairying." It may occur to the reader that what I have written so far, has had little if anything to do with the Evolution of the Dairy Cow except as a summary of the trials that were initiated for her benefit. In reply I would say that the improvement in every way in the Dairy Cattle competing in these trials went *pari passu* with the frequency of these practical tests, and that whereas in the early days there were comparatively few perfect specimens of the Milking Cow there are now present at the "Royal" and at the London Dairy Show ten times as many as there were in 1881.

Taking general appearance first. Some thirty-five years ago a wedge-shaped cow with other recognised dairy points, such as escutcheon and good udder, would not have found favour with Judges who were accustomed to give their awards to animals in training for Smithfield, a fact which I found to my cost when occasionally I had to act with other Judges in awarding a Champion prize to the best Dairy Cow in a Show.

It is not necessary for me to elaborate this point, or to say more on the general improvement in type and quality of the Dairy Cow, as I am confident that it will be agreed on all sides that the Pedigree Dairy Cattle exhibited at the Royal Agricultural and the London Dairy Shows have improved, year by year, in a wonderful way and are as near being perfect as they can be. I refer especially to the Dairy Shorthorns, the Lincolnshire Red Shorthorns, the Red Polls, the Ayrshires, the Channel Island breeds and the Kerries and Dexters.

That the improvement in general appearance has not in any way been prejudicial to the milk yields of the cattle who were entered for both the Ring classes and the practical trials is shown in the two following tables, which speak for themselves :—

TABLE I

Showing average results of Milk yield trials over two periods of five years from 1905 *to* 1909 *and from* 1921 *to* 1925 *at various Shows of the Royal Agricultural Society.*

Name of Breed	No. of Cows		Days in Milk		Milk.				Fat percentage		Points	
	1905–9	1921–5	1905–9	1921–5	1905–9		1921–5		1905–9	1921–5	1905–9	1921–5
					lbs.	%	lbs.	%	%	%		
Shorthorns .	51	76	66	42	46	$8\frac{3}{4}$	51	$10\frac{33}{38}$	3·29	3·49	62·35	66·13
Lincoln Red Shorthorns	26	43	66	43	49	$9\frac{8}{13}$	55	$11\frac{16}{43}$	3·42	3·43	65·91	70·48
Red Polls. .	29	34	93	80	40	$8\frac{2}{25}$	49	$2\frac{7}{17}$	3·30	3·39	59·09	66·66
Ayrshires. .	16	32	64	44	41	$8\frac{9}{16}$	51	$2\frac{1}{8}$	3·67	3·48	58·67	66·39
Guernseys .	36	49	63	73	38	$5\frac{1}{6}$	38	$11\frac{41}{49}$	4·10	4·35	57·00	59·53
Jerseys . .	74	93	99	97	37	$8\frac{35}{37}$	35	$1\frac{4}{93}$	4·58	4·58	61·79	57·86
Kerries . .	41	28	69	60	33	$10\frac{18}{41}$	37	$11\frac{2}{7}$	3·59	3·58	50·45	54·50
Dexters . .	45	32	63	56	31	$8\frac{3}{5}$	29	$12\frac{7}{16}$	3·55	3·57	48·04	45·98
British Friesians . .	—	73	—	65	—		63	$2\frac{46}{73}$	—	3·02	—	78·64

TABLE II.

Giving the average number of certain breeds of cattle entered for the Butter test competition, with the Butter Ratios in two periods of five years, 1905 *to* 1909, *and* 1921 *to* 1925, *at the Royal Agricultural Society's Shows.*

Dates	1905–1909		1921–1925	
Breeds.	No. of Cows	Ratio	No. of Cows	Ratio
Shorthorns	20	30·01	56	29·86
Lincoln Red Shorthorns . . .	19	28·23	33	29·07
Guernseys	14	22·54	30	22·84
Jerseys	85	19·66	99	20·59

From these it will be seen that the yields of milk, except in the case of the Jerseys and Dexters, have progressed steadily, the yields of the first period of five years being below those of the second period.

It will also be observed that the percentage of fat has gone up proportionately with the weights of milk which, in my opinion, points to the fact that the increase in milk is the result of careful breeding and selection and not of extra feeding.

The tables show further that with the exception of the Jerseys, which are noted for their long periods of lactation, and perhaps, too, the Red Polls, the bulk of the cattle have had their last calf from six to ten weeks before the trials, so that the long periods of lactation which at one time were instrumental in gaining prizes for cattle who were not breeding regularly, have disappeared.

I regret that it was not possible to include the records of the British Friesians in these tables, as none of this breed were exhibited in the period 1905 to 1909, and the two sets of figures were got out expressly for the purpose of comparing the yields of the second period with those of the first.

I have, however, inserted the records of this breed in the period 1921 to 1925, from which it will be seen that the British Friesian milks came out top of the list in quantity of milk, but bottom in fat percentage.

One word with regard to private milk records is, I think, necessary.

To my mind the omission of the date of calving nullifies the value of the returns. In a natural state a cow (like deer) would have a calf fairly regularly in the spring of the year, and as she got forward in calf her milk supply would dry up. The abnormal desire of breeders to publish the return of heavy milking cows has made them oblivious of natural conditions and tempted them to keep back their cows from breeding and so enable them to publish what I consider a wrong statement as to the amount of the milk the cow should be expected to yield if she were breeding regularly.

To keep back the cow from breeding regularly is, in my opinion, a pernicious practice, and is detrimental both to the cow and to her offspring, whenever a calf does arrive after a prolonged period of lactation.

I myself would not buy a bull from any cow which was not having a calf every twelve months, and I would rather have a cow giving 800 to 900 gallons per year and breeding regularly than one giving double that quantity and having one calf only in two years. The difference of an extra calf is all in favour of the regular breeder as, nine times out of ten, the calf would be stronger in constitution and so be more fit to be head of a herd. To summarize, the period of lactation in milk recording should in my opinion be calculated from the birth of one calf to the birth of the following calf, which, in my experience as a breeder of over thirty-five years, ranges from eleven to thirteen months. A milk record on such lines would be absolutely fair, as it would show not only the value of the cow as a regular breeder, but the maximum amount of milk for which she ought to have credit in the period of a year of twelve months.

In cases where the difference between the birth of the two calves exceeded the period of twelve months, the true way of arriving at the quantity of milk for which the cow should have credit would be to take the record of the first three months after calving and then to take the records of milk, counting backwards from the birth of the next calf for a period of nine months. This, covering as it does the period during which the cow would be dry, shows the true value of the cow as a milk producer for twelve months, and also her regularity in breeding, which under the system at present in fashion is quite lost sight of.

Referring again to the unique condition inaugurated at the Kempton Park Jersey Show, as described on page 3, it may be pointed out that this certificate was of little value, as no guarantee of accuracy could be then obtained, and the owners of Jerseys were dependent entirely on their cowmen, who were not keen to give their hardly earned knowledge away.

Could it have been obtained it would have been very valuable, as my experience in carrying out the milking trials has been, that with a change of herdsman, the quantity of milk is very often affected, which I put down to the knowledge acquired from judicious feeding. It may be true that "the bull is half the herd," but the value of a good cowman can hardly be overestimated.

The research and practical work carried out by Mr. R. Boutflour, and explained in full by him in his article on "The Management and Rationing of Dairy Cows,"[1] shows most clearly the importance of scientific feeding and gives information that cannot fail to help the practical Dairy Farmer to maintain the maximum supply of milk without impairing the constitution of his cows. My experience as a breeder coincides with his that if cows are to be profitable they must be regular breeders and not be forced to attain high records at the price of their constitution.

To conclude, a long experience with dairy cattle, and particularly with milk and butter tests in the Showyard, leads me to think that the last generation or so has been one of steady progress in the evolution of the correct types. The work is not finished, and much still remains to be learnt, but so long as the pitfall, which success in the Showyard may present to the breeder who is not actuated solely by the desire for the improvement of his herd, is avoided, I have no doubt that progress will continue to be made.

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THE SUFFOLK HORSE.

It has fallen to the lot of some to write on the Suffolk Horse who have had a life-long knowledge of the breed, but none can claim, in addition to their childhood recollections, that they have filled for thirty-eight years the post of Secretary to the Society, founded with the object of promoting the welfare and popularity of the breed.

If these years spent in tabulating pedigrees, searching up ancient events relating to the Suffolk Horse, with descriptions of bygone animals, are of interest, it is clearly a duty to place them on record. For almost all the facts relating to the ancient history of the Suffolk Horse we are indebted to the late Mr. Herman Biddell, of Playford, who spent, as he himself said, the best five years of his life in searching old newspapers, books on agriculture, in addition to old catalogues and horse-cards, to obtain information in regard to the breed and this, his great work, he embodied in Volume 1 of the Suffolk Stud Book. This work, on which the editor spent so much time and brought his rare intellectual faculties to bear, was published in 1880 and has been admitted by those who might well be considered his most severe critics to be a masterpiece in the way of a foundation volume and history of a breed. The easy style of the writer, the detailed information given, together with the lucid practical comments, to be found punctuated at short intervals, call for expressions of praise and pleasure from those who peruse the work, although possibly at the commencement the reader may have been intent only on obtaining hard outlined facts relating to the pedigrees and history of the breed.

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[1] *Journal of the British Dairy Farmers' Association.* Vol. xxxvii, 1925.

Volume 1 of the Suffolk Stud Book was originally issued at one guinea, but although the price has increased five-fold the stock is very limited and there appears little doubt that this work will one day be of great pecuniary value.

The casual reader of the history of the Suffolk Horse, as recorded in the first Stud Book, cannot fail to be impressed by the infinite pains and the immense amount of trouble the editor bestowed upon the production of this work. Not only are most accurate descriptions given of prominent horses of bygone days, their pedigrees traced, but notes of interest pertaining to the times and conditions then existing were added. The breeders themselves are also most characteristically alluded to, and in some instances their peculiarities noted. In fact, in after years the Stud Book may not only be invaluable in tracing the pedigrees of the Suffolk Horse, but it may be also valuable in tracing personal pedigrees of those who are descendants from Suffolk breeders of the eighteenth century. Amongst other items of interest the weather in extraordinary seasons is mentioned. Mr. Biddell had reliable data that *Smith's Horse of Parham* was foaled in 1799 and, in addition, he ascertained it was a wet harvest. The harvest of 1879 was also wet and, comparing it with former disastrous years, allusion is made to the year 1799 in the agricultural letter of the *Suffolk Chronicle,* which says : "In August heavy rain and cold easterly winds set in. The turnip fields were turned into perfect mire. The hay and clover were half rotted, and the corn was badly laid. . . . September was, if possible, worse, the corn lay soaking in water the greater part of it, and much of the wheat died from excess of moisture before the grain had reached maturity." In November the report was—"my neighbours have not finished harvest. The oldest inhabitant cannot remember the like. I had many acres of barley on the ground for two months, as it rained the greater part of the time."

Another prominent point which cannot but impress those studying the Suffolk Stud Book is the systematical and business-like manner in which the editor of Volume 1 set about getting his information and matter together. Not only did he search through advertisement cards, County newspapers, show catalogues and interview numerous breeders and dealers, but he made a point of inviting horse-leaders to his house and if they could not make the journey he visited them himself at their own homes.

Of the many interviews and conversations recorded perhaps the most typical is the account of the editor's visit to Daniel Pattle, which he summarises as follows : " Old Mr. Pattle was eighty-five when I first went to him, note-book in hand, bent on getting from him what no other man could give. He was living at 'Cattawade Crown'—cheerful, stooping, broad-shouldered, but very old, and spoke like a man whose work was done. 'Good morning, Mr. Pattle, you can tell me of some horses which lived a long while ago, can you not ? ' 'I can't tell you much : my memory is gone—you have come too late, sir.' 'But you have some old horse cards, haven't you ? ' 'No, sir, not any now : three years ago I burned a thousand. There were as many as would lie on this table. I used to read them of a night when I could see. I had collected them ever since I was a boy. When I moved here, to my son's, I burned them all.' A thousand advertisement cards and some of them seventy years old! I felt inclined to ask him *where he put the ashes!* But the old man's memory was far from gone, and only wanted to be 'led up' to bring out tales of horses which he had known and whose hides had been tanned seventy years : quaint stories of his boyhood, recollections of what none but a man of fourscore years could give. He travelled a Suffolk horse in Yorkshire three seasons and 'brought his master home a fortune.' He had been to Mr. Coke's sheep-shearings at Holkham : took a horse up that way for three seasons, and 'did well,' albeit the said horse was a blind one. 'Yes, sir, he was blind as a bat of both eyes, and no one ever found it out but a boy. When we came along the road the little rascal sung out, "Master, your horse is blind ! " "Go away," said I, "he's all right." He saw me chuck the bridle when we came to the stones ! ' From him, too, I got at a date to which no one else could help me. 'No, sir, I can't tell you when Smith's horse died—a very good horse he was, a gentleman all over : I knew him well, but that's a long while ago, sir' (Smith's horse was foaled about 1798). 'I can't tell you at all when he died, sir. My uncle—he owned old *Gye* 939 and lived at Elmsett, sir—he had a mortgage on Smith's farm. When the old horse died, that quite broke Smith up, and that year the money was called in. Yes, sir, I was just twenty then.' And so it was we got at the date of the death of *Smith's Horse of Parham* 1110. But I learned other things from Daniel besides these, and six months afterwards made up my mind to go again. I did go, but this time I *was* too late. The hearse was at the door, and they buried the old man while I waited at Manningtree station for the train back to Ipswich."

From the foregoing it will be seen that every opportunity was taken to confirm verbal and in fact all information received pertaining to the breed, and no trouble or expense was spared to ensure that the history, as recorded, was accurate.

Sufficient has been written to make it clear that much of the history of the Suffolk Horse and particulars relating to the breed would have sunk into oblivion if it had not been for the timely work produced by Mr. Herman Biddell and published in 1880.

The first mention of the Suffolk Horse is found in *Camden's Britannia,* published in 1506, whilst Arthur Young, the well-known agricultural writer, alludes to the Suffolk Horse as being an old breed when he was a young man. Considering that Arthur Young was born in 1741 it is evident the East Anglian breed had been in existence many years previous to that date. At the present time all Suffolk horses trace back on the sire's side to *Crisp's Horse of Ufford,* foaled in 1768. He is described on his advertisement card as 15.2 hands high, light chestnut and active, and is depicted as having a large carcase on short legs, low fore-end with bent hocks. Such was the ancestor of the Suffolk Breed from which all animals of the present day claim their descent. Although the owner of this noted horse allowed him to travel at what may be considered a ridiculously low fee of five shillings, he inserts in the advertisement "have no occasion to say anything more in praise of him, as he is so noted a horse for getting remarkable fine colts" and after giving the route he will travel adds "so to continue the season, God willing."

This horse, hailing from Ufford, was the sire of *Gleed's Horse of Dickleburgh* 587 which was advertised as "a bright chestnut carthorse with flaxen mane and tail, 16 hands high, well-boned and free from all blemish, and well known to be a good drawer"; or as we should say at the present day a good puller.

Considering that pulling contests have been recently introduced at the American Fairs and even in London, it is interesting to note that the Suffolk Breeders were engaged in these competitions probably two hundred years previous. In confirmation of this the following notice appeared in 1742: "This is to give notice, that at the 'White Horse' at Aldham, on Friday the 18th of this instant June, will be given a silver cup of two guineas, to be drawn for by any team of horses, mares or geldings, and no less than two teams to draw for the said prize, and they that make twenty of the best and fairest pulls and carry the weight over the block with the fewest tifters, according to the judgment of the proper persons, shall be instituted to the prize. Those that draw, to enter their names between the hours of ten and twelve on the day aforesaid, and the first team to be upon the pin by three of the clock."

Also some twenty years later the following advertisement was issued: "Harleston, Norfolk. This is to give notice, that on the 18th of this instant March, there will be a drawing for Stallions at the house of John Hamblem, called the "Magpie," for a silver cup value five guineas: no more than seven to enter and not less than five. Each horse to draw single, to raise the most weight. The best of twenty pulls, and for every blank, to have a bushel of sand laid on the waggon."

Youatt, writing on agriculture in the last century, says: "The excellence, and a rare one, of the old Suffolk consisted in nimbleness of action, and the honesty and continuance with which he would exert himself at a dead pull. Many a good draught horse knows well what he can effect: and after he has attempted it and failed, no torture of the whip can induce him to strain his powers beyond their natural extent. The Suffolk, however, would pull at a dead pull until he dropped. It was beautiful to see a team of true Suffolks, at a signal from the driver, and without whip, down on their knees in a moment and drag everything before them. Brutal wagers were frequently laid as to their power in this respect, and many a good team was injured and ruined. The immense power of the Suffolk is accounted for by the low position of the shoulder, which enables him to throw so much of his weight into the collar."

Such entertainment, however, would not be permitted at the present day: for what would the public, what would the Society for the Prevention of Cruelty to Animals, have to say when it was known that these teams were not allowed to pull with their collars on, but bare hames or seals was the order of those days.

Previous allusion has been made to *Smith's Horse of Parham* 1110, he was the fourth generation from *Crisp's Horse of Ufford* 404, and was bung-tailed, that is his tail was removed close to his rump, as was also his sire's. He was of dark chestnut colour and an old horse-leader describes him as "a good hoss all over a gentleman." Mr. Biddell tells us he belonged to a little farmer at Parham, who worked him all the week and did a great business in fees when the day of rest came round. This noted horse left numerous progeny; of these, two stood out prominently, namely, Brady's *Briton* 198 and Julian's *Boxer* 755. At the time the first volume of the Stud Book was published both these sires had many prizewinning descendants then living to their credit, although the former sire carried the palm. However, on referring to the prize-chart annually published in the Stud Book, we find that Julian's *Boxer* does not now appear as having a single prizewinning representative, and has not done so since 1922. This is more remarkable when one reads that this horse travelled twenty-five seasons and died at the age of thirty. Brady's *Briton* 198, foaled in 1809, like his sire, left two prominent colts, *Plant's Horse* 950 and Groom's *Ramper* 636, and from these two offsprings the prizewinning Suffolks of the present day all trace their descent. There is something remarkable in the lines of descendants from these two horses; at a certain period it will be found that the progeny of the latter are much more conspicuous in the show ring than those of the former, and then if we look further on, after a lapse of twenty years, the reverse has happened, and the *Plant's Horse* descendants are winning almost all the prize ring honours. At the present day honours are about equally divided. There is another curious fact in regard to these two lines of pedigree, and that is, for nine generations on one side and ten on the other, the claim to being the ancestor of the present day Suffolk hangs on a single sire. *Plant's Horse* was foaled in 1815, the ninth generation is *Wedgewood* 1749, foaled in 1886. Groom's *Ramper* was also foaled in 1815, the tenth generation we find in *Eclipse* 2627, foaled in 1889. Thus the prize-winning animals of to-day are all descended on the sire's side from these two horses. This must be considered a remarkable and interesting fact. Here we have a breed tracing their descendants back in direct male line to the year 1768, yet after the space of about 150 years all prize-winning animals are the produce of one or the other of these two animals foaled about forty years previous.

Few breeders who are conversant and have a life-knowledge of the Suffolk Horse appear to be aware of these particular circumstances and if they are, none can give a satisfactory explanation. This would have indeed been an interesting problem for the Editor of the first Volume of the Stud Book to have tackled, had he been spared to have seen the peculiar working of the pedigrees he bestowed such pains and time to unravel. In the history of the breed prior to the publication of the Stud Book in 1886 there had been three known cases where outside blood had been introduced and we gather in all three instances the infusion proved a success for a time, being more pronounced about the fourth and fifth generations, but after a period of ten generations the showyard contained no traces of these endeavours after improvement. Of the three occasions where strange horses were introduced Blake's *Farmer* 174, foaled in 1760, was the first, and his advertising cards read as follows: "Farmer was the property of the late Mr. W. Garthsides, of Lincolnshire: bred by Mr. Garthsides, got by Mr. Wallet's famous *Golden Farmer*, son of Rigby's *Fearnought*, his dam by Eyven's stud, remarkable for strength and moving. He goes as well as any horse in the country, there are few able to perform with him." This horse was of chestnut colour and is referred to by the Editor of Volume 1 as the trotting horse, and he mentions that when this horse was introduced it evidently was not with the intention of breeding cart-horses, as particular attention is called to his performance or action. He was no doubt an undersized animal, as allusion is made to his two-year-olds being full of bone and standing 15 h.h. Whatever the qualifications of this horse were, as a sire, mated with Suffolk mares, he proved an unqualified success. Numerous descendants of this horse appeared before the public, it being actually the most popular strain, for the space of a hundred years after this Lincolnshire introduction made his appearance. Yet notwithstanding the sires of this blood had been mated with the best blood then in existence, the stock dwindled considerably after about 1860, and by 1900 it was obliterated.

The next instance of the introduction of outside blood was in the year 1802, when one John Wright, of Attleborough, Norfolk, decided to travel *Farmer's Glory* 1396 in the centre of the Suffolk Country. This horse is described as a beautiful chestnut cart-horse; he had a certain amount of white on face and legs, and superfluous hair was more marked than in a well-bred Suffolk. It is stated this horse also came from Lincolnshire, and as John Wright was a well-known Norfolk dealer there is every probability that his business transactions would frequently take him to that part of the country and not improbable that he should purchase this horse and that it was the produce of a Suffolk mare he had previously sold to the breeder. From the stock left by *Farmer's Glory* it is evident he introduced, at the commencement of the nineteenth century, size and possibly white faces into the Suffolk Breed. It is only a few generations after this introduction that we read that one of his descendants, Mumford's *Champion* 891, bred at Lavenham, Suffolk, weighed upwards of a ton and stood 18 h.h. Although this Attleborough strain had a long innings and sired numerous and successful animals in the show ring, it did not maintain its hold for the same length of time as the Blake's tribe.

Bouncer, foaled in 1878, bred by Mr. A. W. Crisp, of Chillesford, was the last sire entered in the Stud Book, being a descendant of *Farmer's Glory*, and as this horse was introduced in 1802 the Attleborough tribe may be said to have been in existence for seventy-six years, whilst the Blake strain had one hundred and four years to their credit.

The Shadingfield stock is the third in importance of the efforts made to introduce fresh blood and was brought into existence about 1793, some nine years previous to the Attleborough stock. The history of Barber's *Proctor* 58 is somewhat remarkable, and Mr. Biddell tells us that Moyse, an old horse-leader in the early eighties, said " the horse was intended for a trotting horse, and, forthwith, he must have the tail with that detestable turned-up dock—the slight curve which puts an indelible stamp of vulgarity on anything so ornamental. But Barber would have his colt's tail "nicked." In that brutal operation, the vertebrae of the tail was dislocated. What was to be done ? Why, take off the remaining joints up to the rump, and there was the customary "bung" tail of the common carthorse of the day. And so Barber's *Proctor* was travelled as a cart-horse. He had, so far, the recommendation for the county : although a bay himself he came of a chestnut mare. His dam was a Suffolk. All this occurred sixty years before Moyse related the story to the writer. That he was correct about the breeding of the sire of Barber's horse, there is little doubt, for in the year 1789, one P. Winter advertises "a blood bay colt full 15 h., by Gooch's horse *Stormer*." He stood at Snape. Nothing is said in Winter's advertisement, either of Gooch's *Stormer* being a blood horse, or of his being brother to *Thunderbolt* ; but the very year that he advertises his colt, Gooch advertises the blood horse *Thunderbolt* as being *brother to Stormer*. On turning to Weatherby's Stud Book, it appears that *Stormer* was bred by the Duke of Grafton, in the year 1774. The age is exactly right, and what more probable than that, proving useless as a race-horse, he should have been sold for a country stallion close by home ? Now, it matters very little whether Winter's *Stormer* was, or was not, the son of a certain horse, but it is of no little importance to test the credibility of an authority so often quoted as our old friend, from whom this history comes.

Conclusive evidence in confirmation of the pedigree of Barber's *Proctor* has of recent years come to light ; unfortunately, however, this was not till after the decease of the Editor of Volume 1 of the Suffolk Stud Book. At a small furniture sale conducted in a country village, amongst a various lot of books, was discovered an old-fashioned leather pocket-book with wallet, giving the manufacturer's name as James Stubbin, Ipswich 1754. Looseleaf ledgers were evidently in vogue in these early days, for sheets of foolscap size were doubled into eight and inserted from time to time. Apparently Mr. Gooch, the owner of *Stormer*, herein recorded his transactions in reference to his stud business, particulars being detailed for the years 1783 and 1785. The entry which is particularly interesting is under the name of *Stormer* for the year 1785 and reads "Mr. Winter Aldbro' sorrel mare." This is assuredly direct evidence of the service, the produce of same being P. Winter's *Stormer* 1329 the sire of Barber's *Proctor* 58, the founder of the Shadingfield tribe. Thus again in after years we are enabled to check the credibility of the source from which Mr. Biddell obtained much valuable information and interesting particulars pertaining to the breed. The produce of the Shadingfield stock are described as usually dark in colour with white legs, thin in the shoulders, and light bone, especially below the hocks, but were wiry, very active with long narrow heads. This strain prospered for a time, but not to the extent of the two previous infusions. It is thought the cross was more drastic and consequently did not blend so well with the Suffolk; one instance particularly noticeable was the mares to the third and fourth generation throw back to the bay colour. The Shadingfield stock cannot be said to have existed for more than fifty years, and the leading authority on the breed says, "I am not aware of any particular benefit that accrued from this cross, the stock were a light-hearted, high-spirited race, but they were often too fiery tempers."

The foregoing may be considered but a brief outline of the three prominent introductions of extraneous blood in the early history of the Suffolk. Other crosses were no doubt introduced, but the results were not important and had no material effect on the breed. There is, however, yet one other instance which is worthy of note. In the breeding of Catlin's *Duke* 296, foaled in 1846, we find his dam was the progeny of a Suffolk-Belgian cross. This horse was the celebrated *Royal Windsor Duke*, the idol of Suffolk Breeders during the years 1850 to 1855. Mr. Manfred Biddell writes of him—"Take him all in all, he was the most perfect horse that I can call to mind. From a foal to his decrepit old age he was a great favourite with all who could forget or forgive the alloy in his composition. He first came out as a two-years-old, when he at once made his mark, although he then looked to some rather too 'punchy,' but from that time he grew in length and certainly became the most popular horse of his day; and if his work be measured by his produce he exceeds all Suffolk horses in the number of winners at Shows left by him, both colts and fillies. His procreative powers were extraordinary, and I had it on the authority of his leader, Charles Row, a man of undoubted integrity, that one season he booked eleven score mares to him, and it is well known that no horse left a greater percentage of mares in foal." He was sold at the Butley Abbey Sale in 1855, on the death of Mr. Catlin, being nine years old, to Mr. Fisher Hobbs, of Boxted Lodge, Essex, the hammer falling at 255 guineas, no mean sum in those days, considering the age of the animal. Volume 1 states, this horse died in a good old age, perfectly sound, having, it was supposed, left more recorded descendants than any other horse. Thus in the year 1880 when the first volume of the Suffolk Stud Book was issued the descendants of this horse were legion. These would be of the fourth and fifth generations, yet notwithstanding this multitude of offspring left to propagate this particular line, we find that after 1912 the direct male descendants do not again appear amongst animals with showyard honours to their credit and thus

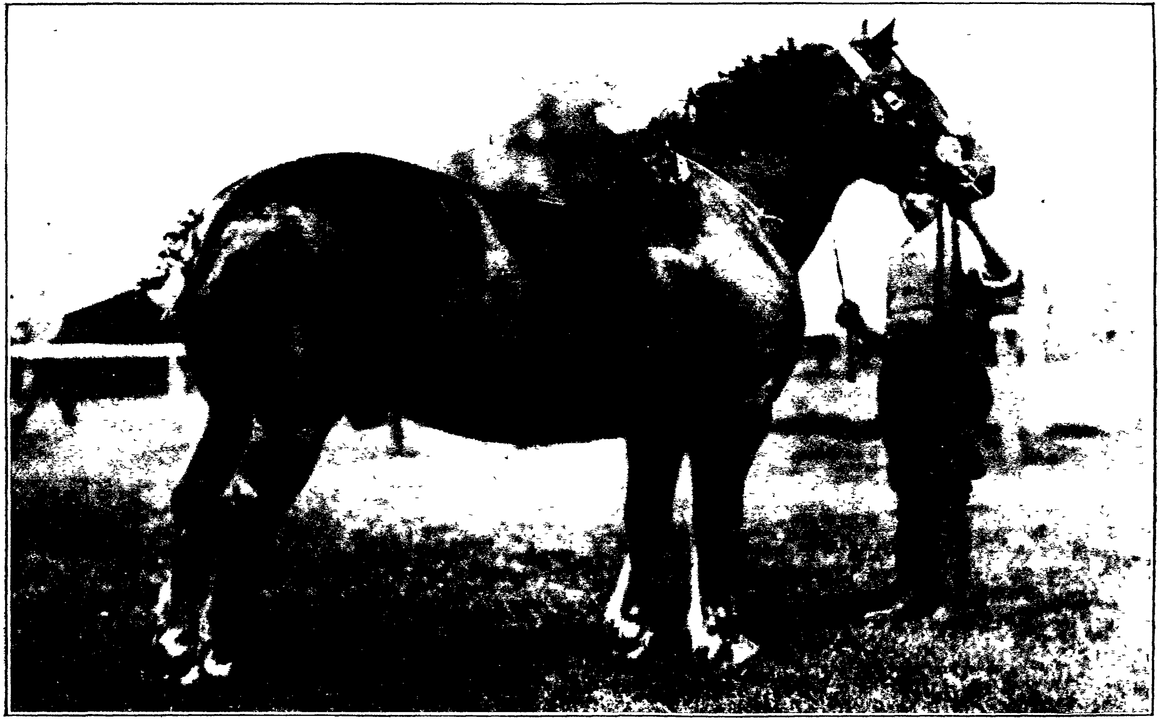

Photo by] [*Sport and General.*

Huntlesham Agility 4935.

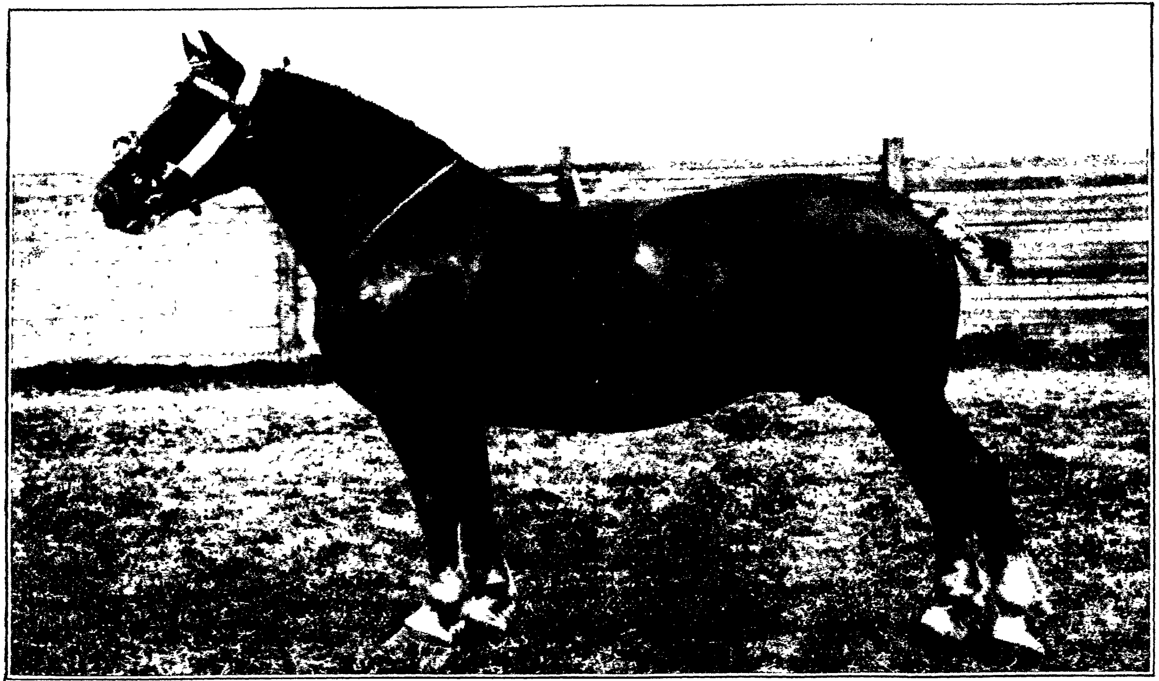

Photo by] [Sport and General.

Morston Golden Girl 9945.

Photo by [G. H. Parsons.

Sudbourne Premier 4963.

the renowned Royal Duke lineage is now entirely erased from the pedigrees of the present-day sires.

As previously mentioned no doubt there are other instances of the infusion of strange blood, but the remarkable point is that although the experiment may prosper for a period, ultimately the stock disappears and the old breed is left to " carry on." Hence it is that the strain running through all the Suffolk Horses of the present day in direct male line is either the *Wedgewood* or the *Eclipse* and under a careful scrutiny this line would be found intermixed to a prodigious degree in all the studs now in existence. Considering the prominent position these two stallions hold, a brief authentic description may be welcome. Although there may be a certain amount of difficulty in arriving at a correct description of an animal, such as would give breeders in generations to come a comparative idea and a reliable criterion of present-day animals, a record of weight and measurements of prize-winning animals cannot fail to be of interest. Fortunately the Council of the Suffolk Horse Society came to the same conclusion and appointed officials in 1891 for the purpose of recording the authentic weights and measurements of the first and second prizewinners at the Suffolk County Show, held at Ipswich. Unfortunately this procedure was not continued the following year owing to an unreliable weighbridge being the only machine available. Present-day breeders, however, are grateful that these interesting figures were recorded if only for one year, for therein are included the particulars of both *Wedgewood* and *Eclipse*. The former in the year 1891 would be five years old and the latter only two years old; allowance must be made therefore for the difference in ages, which is considerable at this early period in the life of an animal, for a five-years-old may be considered a mature animal whilst a two-years-old is a youngster. The recorders were William Biddell, of Lavenham, at one time Member of Parliament for the Sudbury Division, and Henry Spurling, auctioneer of Shotley, Ipswich, and they duly certified that the figures given were correct to the best of their belief. These read as follows :—

Wedgewood 1749. Weight 18 cwt. 2 qrs. 16 lbs. Girth 7 ft. 8 ins., below the knee 10 ins., below the hock 12 ins. Height 16 h. 2½ in.

Eclipse 2010. Weight 16 cwt. 2 qrs. — lbs. Girth 7 ft. 2 ins., below the knee 10 ins., below the hock 11 ins. Height 16 h. 1¼ in.

It will be seen from the figures that *Wedgewood* was not a big horse but he was short on the leg, a Punch all over and what is often termed " a little big 'un." In latter years his girth increased and he was nicely turned from the rump to the setting on of the tail, which characteristic was generally distinguishable in his numerous progeny. Above all, he had excellent feet, and this qualification he imparted to his descendants, which was most desirable at his time, so that in this respect he stands out as a great benefactor to the breed. He was bred by B. A. Posford, of Falkenham, and was first shown at the Woodbridge Spring Show as a two-years-old, but was unnoticed; at the Summer Show in the same year, however, he was placed first in his class and sold for 250 guineas to Alfred J. Smith, who stood him at the Barrack Farm, Woodbridge, till 1892. Under his new owner's name he had a long unchecked showyard career and, in addition to winning numerous Champion prizes, he was awarded the Champion Prize, including the Queen's Gold Medal, at the Windsor Royal Show in 1889. *Wedgewood's* progeny was most conspicuous in the Sudbourne Stud, his descendants being such well-known sires as *Sudbourne Count* 3257, *Sudbourne Arabi* 3287, *Sudbourne Arab* 3309 and numerous others, including in addition a long list of prizewinning mares. Of the many sires he left to perpetuate his name A. J. Smith's *Saturn* 2653 was the most prominent in that he was champion stallion at the Suffolk Show three years in succession. In the various volumes of the Suffolk Stud Book will be found charts showing the pedigrees of the first and second prizewinners at the principal shows. From a casual glance at these interesting records it will be found that the Wedgewood stock, representing *Plant's Horse* 950 foaled about 1815, was prominent as prizewinners from 1900 to 1910. During the next five years the honours of being the sire of the prizewinning stock was about equally divided between the Wedgewood and the Eclipse ancestral line, the latter being the representative of *Groom's Ramper* 636, also foaled about 1815.

There is no doubt, however, that many excellent Wedgewood mares were mated to *Eclipse* about this time, and many of the animals seen in the showyard were the result of the Wedgewood-Eclipse cross; these are registered to the credit of *Eclipse*, he being the sire.

Since 1915 the pendulum has been gradually swinging in the favour of this strain, which has generally been designated as the Cup-bearer line. *Eclipse* is now the only connecting link between those noted three generations of Cup-bearers and the horses of the present time; it may be advisable in future to refer to the descendants of this important, if not the principal line of pedigree, as being the Eclipse strain. As previously stated *Eclipse* was foaled in 1889 and was bred by a noted breeder of the period, Mr. Edwin Capon, of Aldeby, near Beccles. Other prominent sires were bred by Mr. Capon, amongst them *Golden Grain* 2479 and *Minstrel Boy* 1759; both these horses made their mark in the showyard and as sires, especially the former, but the latter was exported to the United States of America when he was five years old. In studying the pedigree of *Eclipse* it will be seen that he has a double portion of Cup-bearer blood, for his sire was a grandson of *Crisp's Cup-bearer* 416, also his grand-dam was sired by *Claimant* 562, a son of *Cup-bearer* 416. From the point of breeding and also from his showyard performances *Eclipse* was a worthy representative of the Cup-bearers, a line of sires which occupied the highest pedestal amongst the breeders of their day. It was said of *Cup-bearer 3rd* that he was the most successful Suffolk horse that ever entered the ring, his winnings during five years amounting to upwards of £900. In describing *Eclipse* one is enabled to gather from the records published when he was a two-years-old that he would mature into a massive animal with a good proportion of bone. Standing about 16 h. 3½ in., in his prime he would have turned the scale at 21 cwts.; being deep in the girth with thighs well let down, he was an excellent mover and possessed good feet. It was at the Suffolk Show held at Ipswich in 1891 that he first made his appearance in the show-ring, when he was placed second to *Windsor Chieftain* 2025, a big-boned animal, but was inclined to be swampy in the back. This decision was reversed at the Doncaster Royal Show soon afterwards, where Mr. Herman Biddell and Mr. J. S. Nunn were adjudicating. Here *Eclipse* was placed first, the Duke of Hamilton's *Wedgewood* second, and *Windsor Chieftain* only obtained the third place. As a three-year-old *Eclipse* carried everything before him and was placed first at the three leading shows. This position he virtually upheld from 1893 to 1897, when he appeared amongst the aged stallions. In addition, this long list of class honours was augmented by numerous Champion and Breeding Stock Prizes. *Eclipse* was the outstanding horse of his day and left a strong army of his progeny at his death, which occurred at a comparatively early age, for it was in the autumn of 1897 that *Eclipse* and his stable companion *Prince Edward*, a most promising three-years-old, succumbed, it is believed, from injudicious feeding. The two stallions sired by *Eclipse* which appear most conspicuous in the Suffolk Pedigrees of to-day are *Golden Grain* 2479 and *Sudbourne Sunshine* 3374.

The breeding of the former is somewhat remarkable. Allusion has previously been made to *Eclipse* having *Cup-bearer 3rd* 566 as his sire, his grand-dam being by a son of *Cup-bearer* 416, thus possessing a double portion of the noted strain. In examining the pedigree of *Golden Grain* it will be found that his dam is by a son of *Cup-bearer 3rd* and his grand-dam is by the same horse *Claimant* 562, that is, the sire of the grand-dam of *Eclipse*. *Golden Grain* therefore possesses a double portion of Cup-bearer blood, not only on his sire's side but also on the dam's side as well. Like his sire, *Golden Grain* has left us two of his descendants which stand out prominently amongst his offspring, namely *Bawdsey Harvester* 3076 and *Sproughton Gold Ring* 3347. The former was a massive, heavy horse in every respect and, as is not uncommon with such animals, at three years old he was still a big overgrown colt with no pretensions to showyard honours. However, as a four-years-old he was quite a different horse and he had no difficulty in being placed in the premier position in the aged stallion class and being awarded the Championship of the yard. This coveted position he maintained during the three following years.

Bawdsey Harvester was the produce of the Suffolk Horse Society's Free Nomination Scheme and was purchased by the President of the Society, Sir Cuthbert Quilter, as a youngster. He was the sire of the champion *Sudbourne Peter* 3955, *Bawdsey Laddie* 3637, and *Morston Friday* 4265, both the last two animals being sold for exportation at a large figure, before they had had much chance at the stud. As the leading sire of such a large stud as is to be seen at Bawdsey, *Harvester* proved equal to the occasion. Of his numerous progeny it is hazardous to predict which will be the prominent strain in the future, but such sweet symmetrical mares as *Morston Girl* 8804, *Sudbourne Moonlight* 8623, *Sudbourne Doris* 7823, and *Sudbourne Dona* 8201 will always stand out to his credit.

Sproughton Gold Ring, also by *Golden Grain*, bred by that well-known breeder, Mr. W. E. S. Wilson, of Hadleigh, was a horse which many stud-owners thought that this country could ill spare, but unfortunately in 1910, when he was only six years old, he was exported to the United States of America. As it was, with only a short time at the stud, he sired the Champion *Gold Guard* 1234 and several other animals which were destined to bring credit to Mr. Arthur T. Pratt, of the Morston Stud.

Of *Sudbourne Sunshine* 3374, the other noted sire by *Eclipse*, it will be found that his dam was by *Wedgewood* 1749 out of a Rendlesham Mare. He was bred by E. J. Johnson, of Rougham, Bury St. Edmunds, and made his mark as a sire at the Woolverstone Park Stud owned by Mr. C. H. Berners, and is frequently referred to as Berners' Sunshine 2734. In 1907, being then ten years old, he was purchased by Mr. J. M. Longe on behalf of the Sudbourne Stud, and in his fresh home, surrounded by the choicest mares of the day, he was an unqualified success. This assertion is beyond refute when it is mentioned that such world-famed animals as *Sudbourne Beaumonde* 3598, *Sudbourne Beau Brocade* 4235 and *Sudbourne Premier* 4963 are the descendants of this noted sire. They and many another, although perhaps not so prominent amongst the showyard rosettes, will help to establish a place for *Sudbourne*

Sunshine, the Eclipse-Wedgewood cross, in the records of Suffolks for years to come.

Thus, the pedigree of the Suffolk Horse is briefly summarised since 1768 to the commencement of the Great War in 1914. It has been shown how extraneous blood has been rejected and disappeared, not one of the alloy strains in the male line being able to stand against the influence asserted by the old Suffolk Breed. As Mr. Biddell says :—" Curiously enough, every introduction of an exterior element infused into the blood has flourished but for a time, and the fact remains that each and all have died out in the male line, overwhelming evidence of the purity, the antiquity and the distinctness of the breed of Suffolk Horses now extant."

To-day the breed stands with a long line of ancestors at its back improved undoubtedly beyond the imagination of the most optimistic of bygone breeders and admirers. Of the purity of breed it is unnecessary to refer to pedigrees or any genealogical charts. Suffolks are all " chestnuts." What other breed of horses is to be found that always breed true to colour ? The Thoroughbred and even the Arab are not to be relied upon in regard to the colour of their offspring. With Suffolks there is only one colour : different shades there may be, developing from the light mealy shade to the cherry red and broadening out to the dark mahogany. The Volume 1 tells us " There are seven shades—the dark, at times approaching a brown-black, mahogany or liver colour ; the dull dark chestnut ; the light mealy chestnut ; the red ; the golden ; the lemon ; and the bright chestnut. The most popular, the most common, and the most standing colour is the last named. The bright chestnut is a lively shade, with a little gradation of lighter colour at the flanks and at the extremities—but not too much. It is, in most cases, attended with a star on the forehead, or thin 'reach,' 'blaze,' or 'shim' down the face. The flaxen mane and tail prevalent 100 years ago, and occasionally found at the present day, are usually seen on the bright chestnut. This shade is also not infrequently shot with white or silver hairs hereditarily distinctive of certain strains. The red chestnut is a very popular colour ; and a red chestnut is almost sure to be a whole-coloured horse. There is no variation of shade in it, not even at the flanks, quarters, or extremities. It is said to come of a taint of bay origin : especially the lighter variety—the cherry red. The golden is a beautiful colour, not many removes from the bright chestnut, but it is not infrequently faced up with a white heel behind. The lemon is a very light golden shade ; known sometimes as the 'yellow' chestnut. The light mealy chestnut is condemned by all ; it is indicative of a weak constitution, soft legs and a slow phlegmatic temperament. Commencing with a dull chestnut body, the flanks and under-line are a mottled ash colour, gradually shading off to a dirty white at the extremities, which are usually covered with soft hair of the same hue. The dark chestnut is a favourite with some breeders, but it is mostly a changing colour, varying with the season of the year, from almost a black to a dark cherry red. It has been prevalent from the commencement of the present century to the present time." Although "the present time" alluded to was some fifty years since, the remarks then penned are equally as applicable to-day as at the period they were written. The different shades of chestnut are still to be seen in going around the various studs but the flaxen mane and tail are still less conspicuous than they were in Mr. Herman Biddell's day and silver or grey hairs are not so prevalent as was the case in the immediate descendants of the Cup-bearer stock, when one could call to mind instances of animals in the Framlingham district which were, if not quite roan, decidedly very closely allied.

In replying to the question—What are the two chief characteristics of the Suffolk Horse ?—the answer would be—Compactness and Hardy Constitution. For endurance and constitution the Suffolk has long been famous and it was so in 1813, when Arthur Young wrote in his description of the County of Essex—"The Suffolk breed of horses are favourites in Essex."

The very name of "Punch" conveys the idea of Dickens' Fat Boy, and on referring to the dictionary the definition is—"Punch, a variety of English horse, short-legged and barrel-bodied, a short fat fellow." Here we have a description, with certain modifications, of what we should expect to find in the Suffolk. A good performer at his work and a keen performer at the manger, always carrying a fair proportion of flesh, whether the rations be scant or plentiful. This qualification was particularly mentioned by Mr. C. G. Tindall, who was largely engaged in heavy transport work in Australia, his teams often covering several hundreds of miles from one point to another. This breeder had considerable experience with Suffolks, for he purchased his first animal for export at the Chelmsford Royal Show in 1856, and in alluding to his experience with the Suffolk-cross horses on this work said that more often than not they came off the journey in better condition than when they set out, having obtained their living solely from the grass by the side of the track they were passing along. Two other reasons he gave for favouring the Suffolk Horse, which qualifications would be of vital importance in the Colonies—they were excellent in standing the heat, and being a breed of such long standing and pure blood they were enabled to stamp their character on their progeny, when crossed with native mares of various descriptions.

The Suffolk was, as was to be expected, a decided success in the Great War. Numerous letters appear in the press amplifying the powers of endurance possessed by the Suffolks. Of these spontaneous testimonials from men in the fighting line, one was very much to the point. After remarking he had come across many different breeds amongst the lines, he says—" before I came to France I was continually being told that it was the feet and legs of a horse of which you must take particular notice; these carry the body and therefore are most important, the carcase being of little account, but now I am a Tommy and have to look after horses myself I am not the least particular about the feet and legs, they will not break, but what I want to see is a good constitution, an easy feeder and a roomy cupboard wherein to stow the food away; no short-ribbed, herring-stomached animal in my lines if I can prevent it." An Artillery Officer in Brigadier-General Holtham's Division, referring to the Suffolk, says :—" He was a big-barrelled, strong-necked, low-bodied horse, with terrific pulling power, and what was more to the point, had a knowledge of how to make the best use of it. One could well describe him as a sort of beefy chestnut Goliath, which pulled anything and everything without much effort and even replaced a team of mules on some occasions."

Of longevity in the Suffolk Breed there are numerous instances. In the history of the Suffolk we find that at one of the early Shows of the Suffolk Agricultural Association a mare was exhibited with a sucking filly by her side, the united ages of which amounted to forty-one years. The filly was, however, we should add, then two years old, but the most reliable evidence was given, which conclusively proved that at the time she was foaled her dam was thirty-seven years old. The mare which bred Webb's *Rising Star* 1266, the first prize horse at Leeds in 1861, was two and twenty years old when the horse was foaled. The dam of Lofft's *Cup-bearer* 824, a mare owned by the Rev. O. Reynolds of Debach, was one of sixteen foals, which he bred from her dam in sixteen successive years.

Those two well-known sires, *Sudbourne Arabi* and *Sudbourne Arab*, are both more than twenty years of age and still standing at the stud to-day, with good results, their produce being still prominent in the Show-ring. Even these patriarchs have some way yet to travel in order to eclipse Julian's *Boxer*, a horse that actually travelled for twenty-five years without a break. The Suffolk can and has been employed for a variety of purposes in his home country and in almost every other part of the universe. For agricultural work he stands out, staunch at the collar, smart in the trace, an easy feeder, and subject to few of the ills to be found, more particularly where length of hair is conspicuous. He may be relied upon to do his bit with easy grace and with less exertion than one would anticipate and in a tight corner he is not found wanting.

As an agricultural horse the Suffolk has for many years been admitted hard to beat. As a horse for horticultural work and market growing, now so much on the increase, he has additional qualifications. Suffolk breeders have never aimed at producing a horse with a massive spreading hoof, but have rather devoted their attention to breeding an animal with a sound, medium-sized hoof, of the best quality. Engaged in such cultivation the Suffolk has the advantage, for he can pass to and fro on a plot of land without doing the damage a heavier-footed animal must inevitably cause. The same also applies to the working amongst fruit trees, where the Suffolk, expecially the lighter class, has been found to render valuable service under the spreading branches of standards and also amongst bushes, where a heavy massive animal is at a disadvantage. Numerous instances could be called to mind of the success achieved by the Suffolk for crossing purposes in East Anglia and also when located far from his native home. Being good doers, with a tendency to put on flesh, even with scanty rations, not inclined to be the least affected by the heat of the sun, are qualifications not to be overlooked in a sire, especially when he is enabled to hand on these characteristics to his progeny.

The Suffolk crossed with native mares in our Colonies produces an animal suitable to all classes of farm work and he can in addition be hitched up on Sunday to drive the family to church. Several Suffolk stallions were some fifty years since sold to the present Irish Free State. It may not be generally known that many of the most valuable heavy-weight hunters contained Suffolk blood, the practice being to mate a Suffolk sire with a well-bred thoroughbred type of mare and to put the progeny again to a thoroughbred sire. The result of such breeding produces the quality and staying power of the blood horse with the modified weight-carrying qualifications of the Suffolk, an excellent hunter frequently being the result.

Mr. R. Good, a veterinary surgeon in County Cork, writing in an agricultural paper said—" I consider the Suffolk horse is the best horse for Ireland. I have had a Suffolk stallion for nine years and have bred over ninety mares each year and left eighty per cent in foal. As for breeding hunters, none better. I have a brood mare got by a Suffolk sire out of a half-bred mare, and her produce with a thoroughbred horse make £100 apiece and work of the farm for three years. In fact the half-bred Suffolks I have will do harness work, such as heavy wagonette, with eight or ten persons in it in great style. They are very hardy, have lots of heart for hard work, easy keepers, splendid plough horses, no dirt on their legs after a day's ploughing, no scratches, grease, etc. Half-bred Suffolks from heavy mares make splendid work horses, being quick and never tiring. I have seen a few results from pony mares, the result is a thick-set cob that can trot ten miles an hour, and easily fed. In fact, I have bred every class of mare, and according to the mares you get, heavy carthorses, vanners, hunters and harness horses."

Sir Wilfrid Blunt, in giving his reminiscence on horse breeding, stated he had been successful in following the Arab and Suffolk cross. The experiment was undertaken, in the first instance, with the object of producing suitable carriage horses for his own use, it being customary for the owner to take long driving tours annually in unfrequented parts of England. So fortunate was he with the produce of the experiment that he says—"In a few years I had the precise animal I required and after six seasons' hard driving, in which they have proved themselves untirable and excellent in every way, I have come to the conclusion they will last me the remainder of my driving days." He further describes them as bright chestnuts with admirable feet and legs and able to trot eight to ten miles an hour and continually cover forty miles a day with ease. A well-known Master of Foxhounds in the Eastern Counties was relating his experience of excellent mounts he had had, and remarked that a certain Suffolk Thoroughbred cross he had ridden for twelve seasons had never had a fall. The Suffolk has frequently been mated with the Shire mare with most satisfactory results, whilst the late Sir Oswald Mosley was very persistent in his praise of the Suffolk-Clydesdale cross.

The Suffolk Punch has always been very limited in regard to numbers when compared with other heavy horse breeds. In the middle part of the last century there is substantial evidence that some stallions were sold for export, but these were few and could not have made a serious inroad on the stock on hand. However, be that as it may, it was not until the publication of the first volume of the Stud Book that the export trade reached any serious dimensions. Australia had been purchasing an occasional animal or two for several years. The same may be said of New Zealand, but about this period Argentina came into the market with orders of from twelve to twenty in a shipment, and this was closely followed by buyers from the United States and Canada.

It has been often remarked of the Suffolk Horse that at the outbreak of War there were few available for Army purposes. This is easily accounted for if reference is made to the Export Certificates granted, as annually published in the Suffolk Stud Book. In this tabulated list will be found not only the name of the animal given but the destination to which it was exported. It will also be ascertained, if a calculation is made of the total of the number of animals exported and compared with the total number of entries yearly recorded, that the Suffolk Horse Breeders were actually, prior to the Great War, exporting not less than one third of their stock annually bred. Any breed being depleted to such an extent must find it difficult to show a vast increase in their numbers. The produce of the majority of animals changing hands in this country would naturally come forward for registration in some future Stud Book, but animals exported are practically lost.

Thus it was at the outbreak of hostilities, when the demand for Artillery horses was most pressing, that the stock of Suffolk Horses in the country was short, following closely on recent years with a heavy export demand. It must not be supposed that it was only the registered Suffolks that were in request, as many a shipment of Suffolk geldings and half-bred Suffolks, both mares and geldings, were sent from Harwich, their destination being Germany and Austria. Had the numbers of Suffolk horses not been so reduced there is no doubt the East Anglican Breed would have appeared much more in the limelight on continental soil during those sad years of devastation. Although not numerically strong, it was no mean record he obtained.

A striking illustration of this occurred at the Suffolk Agricultural Show held at Ipswich in 1888. The previous year those two well-known stallions Mr. Biddell's *Foxhall* and Mr. Edgar's *Leiston* had been exported to U.S.A. They had been shown and criticised at the Fairs the previous fall, with the result that three influential American buyers in a large way of business made their appearance for the first time at this Suffolk Show. Their object, they stated, was to handle a clean-legged horse and they were of the opinion the Suffolk would fill the bill with their customers. If they created a demand for the Suffolks they must naturally be able to supply the goods, otherwise it was not to their advantage to spend their dollars in building up a market for any breed of which future supplies would not be available. It was estimated that they would require some six hundred head during the forthcoming three years. Eventually it had to be admitted that if their requirements were of such extensive numbers the animals could not be procured. The sequel to this visit was that these three American Importers went direct to France and purchased Percherons, although they admitted they would have preferred the Suffolk, as they considered him the better horse of the two.

Allusion has previously been made to the excellent work and of the highly complimentary reports received of the Suffolk Horses engaged in active service during the War. As a result of such meritorious services rendered, the Army Remount Department decided some three years since to send a Buyer down to the principal centres of the breed where owners could send in their animals for inspection, and if approved and after passing a strict veterinary examination, they were purchased for Army purposes. After the second batch had been despatched some six months, the Secretary of the Suffolk Horse Society (Mr. Raymond Keer) made enquiries as to how the recently purchased Suffolks had acquitted themselves. A report from the headquarters of the Royal Artillery, 3rd Division, from Bulford was received stating "The Officers consider these Suffolk Punches are, as regards haulage powers, certainly the equal, and in some respects the superiors, of other breeds of heavy horses of which they have had experience. They have performed satisfactorily the normal Artillery work of peace time on Salisbury Plain. They are good doers, and keep their condition on their Government ration, are active, show great perseverance, and maintain a good walking speed. They are easy to train, and are particularly docile, especially in stables. Their clean legs mean less work than with the rough-legged breeds, and the leg diseases most prevalent with the latter are absent."

A recent number of the *Live Stock Journal* contained the following, "Army Officials have, following a Parade of Suffolk Horses at Ipswich and Bury St. Edmunds, purchased thirty-one geldings and gast mares ranging from four to six years old. At each centre goodly numbers of Punches of these ages, and all of them sound, greatly pleased the Army Buyers. The two parades in the east and west of the county were pleasing sights, especially when the uniformity of colour of these whole-red chestnuts, which were active on sound feet and legs, are taken into account. The selected animals were submitted to the severest tests by the Army's inspecting officers and veterinary surgeon, who made favourable comments on the character of the animals. The thirty-one animals selected by the inspecting colonel were true to the breed type and most suitable to take their places in any gun team, for which purpose it is understood they are to be used. Another satisfactory feature of these two parades was that the smaller breeder shared in the sales that were effected at prices which cannot but be regarded as a paying proposition."

The Suffolk Punch is making new friends. In June last a representative party of agriculturalists and pastoralists, numbering some fifty-seven members in all, arrived in this country from South Africa, their object being to gather information as to our methods of agriculture and stockbreeding as well as to investigate the various conditions of marketing the produce. The party consisted of representatives of all parts of South Africa, ranging from the sparsely populated regions in the Northern and Western Transvaal to the more thickly populated districts in the Cape Province. Mr. W. Callender-Easby, one of the party, contributed an interesting article to the *Field* setting forth the opinion and the impression the British Stock made on his companions and the party collectively. In his allusion to the Suffolk Horse it is stated: " Of the different breeds of cart-horses the Suffolk Punch was a very easy first in the estimation of the party as being most suitable for our conditions, and would undoubtedly be of great value for grading up to light Colonial mares of the country, which in most cases lack in weight and in many cases in courage and docility.

" The Suffolk has these two qualitites emphasised in his make-up, and owing to his long line of straight breeding might be expected to stamp those two desirable qualities upon his progeny. His general conformation is also much in his favour, nearly all of them are well ribbed up, short in the coupling and strong in the loins, with beautiful rounded hind-quarters, short, flat, hard-boned legs, and, as bred at present, with good hard blue feet, a very necessary qualification in the Colonies, where horses are seldom shod. For some unaccountable reason a chestnut colour is not liked in our Union, there being a widespread belief that a chestnut horse is nearly always a vicious horse'; this is emphatically not the case with the Suffolks, one of their well-proved qualities being docility. I have also heard it said that the Suffolk mare is not the most suitable for mule breeding, being liable to throw mules with heavy, sluggish heads; the Punch is rather heavy in the head and latch, and whilst not being out of place on his own short neck and thick-set body, this head and neck would be fatal on mules, as mules with coarse donkey heads are unsaleable and are usually sluggish and vicious brutes.

" Our party was given an opportunity of seeing several of the noted Studs of Suffolks, notably the Coney Weston Stud, which has at its head that wonderful old horse, *Sudbourne Arabi*, a horse now 21 years of age and still working well. The value of a sire is always found in his progeny, and the Coney Weston Stud contains amongst its young stock some of the most perfect specimens of the breed it has been my pleasure to see, one two-years-old Colt particularly impressed me as being most suitable for the Colonies and especially for South Africa. He is of grand formation, not too heavy, most typical of the breed, wide, level back, beautiful colour, short cannon bone, splendid hard feet; in fact, full of quality, and with it all one of the fastest movers I have ever seen. The matrons of this stud came in for a lot of admiration, and the owner is to be congratulated on having got together such an even lot of well-bred animals.

"The Orwell Park Stud was also visited, and this Stud was seen under unusual conditions, all yoked and shown as they can be seen daily. This manner of showing the animals impressed our party immensely, and did more to popularise the breed than any other method; we saw them under ordinary working conditions on the farm, and not under show conditions, and it was here where the party were convinced that the Suffolk was the right horse for our conditions, and it was here where a beautiful specimen of the breed was seen, a stallion, belonging, I believe, to Mr. A. T. Pratt, a gentleman who has done much for the breed. It was regretted that time did not permit of our visiting other noted studs, such as the Bawdsey, the Cressing, the Garston, the Riddlesworth and many others."

Such is the impression of the Suffolk Horse on the impartial minds of our Colonial friends. If breeders will but bear in mind the old princely type, having moderate-sized feet of good quality, and short legs with clean joints, devoid of all tendency to coarseness, possessing a deep well-ribbed-up carcass, with width behind as well as in front, and standing about 16½h. h., there will be little to fear from outside competition where'er it may come in the shape of horseflesh or mechanical power. It appears to be human to go after strange gods and some are apt to be inclined to sacrifice everything in the endeavour to obtain greater size. Is it not universally admitted by all horse-breeding authorities that it is much more difficult to breed a big good animal than a small good one? and the latter is much more likely to be free from unsoundness. Why then strive for an animal 17 h. h. or over with the chance of it being cast in the veterinary examination, especially in the present days when the steam wagon is supplanting the heavier horse for long distances.on the road, which is becoming more and more difficult for horse traffic?

If the Suffolk Horse is bred on the lines indicated he will be found capable of exerting the old endurance at the dead pull, will be blessed with a docile temperament, and marked capacity for thriving on short rations, while no day will be too long at the collar.

With such an animal there is no fear of there not being a place for the Suffolk amongst the numerous vicissitudes of this workaday world. Competition must, no doubt, become more acute in the direction of mechanical traction, but the Suffolk Punch will still be an animal desirable and useful to man.

FRED SMITH.

Woodbridge, Suffolk.

THE USE OF THE DYNAMOMETER IN SOIL CULTIVATION STUDIES AND IMPLEMENT TRIALS.

INTRODUCTION.

IN all competitive trials of cultivation implements the results are interpreted on the assumption that the soil of the field was uniform to begin with. The relative draughts of different ploughs would be assessed by comparing the traces of a recording dynamometer in the hitch between the plough and the horse or tractor, and any pronouncement as to the ease of draught of each plough would be based largely, if not entirely, on these records.

In the case of field experiments, such as manurial or variety trials, the question of soil uniformity is also very important. The inherent natural fertility of a field varies from point to point, and the yields obtained from a limited series of plots receiving different manures cannot therefore be attributed solely to the effects of the added manures. In the modern development of plot technique, this difficulty is to a certain extent met by having several plots for each treatment and by subjecting the results to a special statistical analysis developed for this purpose.

The above two illustrations are typical: either one tacitly assumes the soil is uniform and hopes for the best, or if the possibility of an unknown degree of variation is recognised, one is compelled to make a considerable elaboration of the experiment.

The importance of this subject was brought forcibly to our notice in the course of a series of investigations made at Rothamsted by Dr. W. B. Haines and the writer, on problems connected with soil cultivation. Considerable use was being made of a recording dynamometer in this work, in measuring, for example, the effect of different manures on the resistance offered by the soil to the passage of a cultivation implement. The results obtained were at first more than usually puzzling. They were difficult to reconcile with one another, and with other known facts. On further examination it appeared that the discrepancies might be due to one or both of the following causes: (1) the difficulty of obtaining reliable readings from a dynamometer under field conditions, (2) an inherent lack of uniformity in the soil itself affecting the dynamometer readings and thus obscuring any effect produced by the manures. It therefore became necessary to make special tests of the reliability of the dynamometer under field conditions and also to test the uniformity of the soil. The former problem—the evolution of a reliable dynamometer technique—presented no special difficulties, but the latter one needed some consideration.

Normally the usual criterion of uniformity is a visual inspection of the area by practical men, supplemented occasionally by a chemical and physical examination of soil samples, taken at regularly spaced intervals across the field. This criterion appeared quite insufficient to us. In the first place a visual inspection can only decide whether the land is reasonably level and free from obvious changes in soil texture, and on this count the fields with which we were concerned would have been unhesitatingly accepted. In the second place, physical and chemical analyses of soil of the number needed, would have involved a prohibitive amount of labour, and in the present state of our knowledge only general inferences could be drawn from the laboratory measurements as to the degree of uniformity of field characteristics. We therefore adopted the direct method of using the dynamometer measurements themselves as an indication of the actual degree of uniformity of a field which passed the visual tests. The results of the experiments, and their bearing on implement trials and field experiments generally, is discussed below.

I. THE EVOLUTION OF A RELIABLE DYNAMOMETER TECHNIQUE.

The Watson dynamometer has been used throughout the experiments. It is not necessary to describe this instrument in any detail, as it is well known through its employment in various official tractor and implement trials. In its essentials it is a self-recording pressure gauge, and the draught is recorded as a continuous trace by a stylus on a moving paper strip. A time record is also automatically made on the chart by means of a clock which actuates an electromagnet every 10 seconds, causing it to draw a second stylus aside momentarily. The forward motion of the paper is controlled by a flexible gearing from one of the wheels carrying the dynamometer, hence if this wheel runs evenly on the land the connection between distance travelled and amount of chart movement should be constant. Owing, however; to the occasional slipping of the land wheel, and especially to the adhesion of soil clods to the wheel, the relation is not exact. This was met by introducing an arrangement by which the time stylus would be depressed in a special distinguishing manner from its ordinary motion, and this mark was used to indicate on the chart the exact point at which a plot boundary or other distinguishing feature was passed. When the chart was subsequently examined the existence of these special marks enabled the chart to be divided up into sections that corresponded accurately with the sections or plots in the field itself. The allied matters of the accuracy of the clock mechanism and the spring against which the oil-pressure is exerted were carefully tested and found to be correct.

The actual result given on the chart therefore could be relied upon as a true record of the forces experienced by *the hitch of the plough* during the operation, but it remained to be seen whether this was entirely due to variations in the resistance offered *by the soil itself.*

The record itself shows a very irregular line corresponding to rapid fluctuations in pull, and it was necessary, firstly, to know whether these were due to chance occurrence of stones or similar obstacles, or whether they represented significant differences in the soil that would always reappear in operations over the same spot. Secondly, it was also essential to see how sensitive the record was to changes in speed, depth of ploughing, manner of hitching and slope of the ground, since these factors would probably not remain at an exactly constant value during a test.

The first query was answered by obtaining records of a cross ploughing of weathered furrows, where the first ploughing had been done in sections at different times, and thus gave rise to corresponding differences along the cross furrows. On comparing the traces of a number of contiguous furrows the charts were found to be almost identical, even small variations in the drawbar pull being reproduced each time the same spot was reached. The experiment was repeated on other fields with similar results. No matter what the actual shape of the trace for a given furrow might be, that of the adjacent furrow was closely similar, both in the general shape from end to end and in the minor details of variation.

The second query required separate tests, although of course the results of the first query gave, indirectly, strong evidence that the implemental factors remained constant. As we used a tractor throughout, in preference to horses, we were able to keep the variable factors under control more easily. In horse-ploughing the character of the work is largely under the control of the ploughman, who will ease the plough or hold it to its work in accordance with the nature of the land. These would have been additional complications that it was advisable to defer until later investigations. The effect of displacing the hitch and "set" of the plough from their correct positions produced bad work, and had little or no effect on the drawbar pull, unless the depth of ploughing became changed. This latter effect was independently tested.

For the normal range of ploughing depths—*i.e.* 4½ in. to 6 in. on this land—the drawbar pull was proportional to the depth, the increase from $4\frac{1}{2}$ in. to 6 in. being about 25 per cent. A correction to the drawbar pull for change in depth of ploughing could easily be made on this basis where necessary. In our experiments, frequent measurement of depth showed no appreciable variation.

The question of the change of slope of the field was examined by comparing the drawbar pull of furrows going up and down the same slope. There was no measurable difference for gradients less than 1 in 40. This result is surprising at first sight, since the extra work on the tractor going uphill is very obvious. But this is mainly due to the effect of raising its own weight, and is not shown on the dynamometer, which only records the extra resistance due to raising the weight of the plough up the slope, and this is very small in comparison with the resistance due to the soil. On a drawbar pull of 1000 lb. due to the latter effect, the extra pull for drawing a 300 lb. plough up a 1 in 40 slope is only 7 lb.

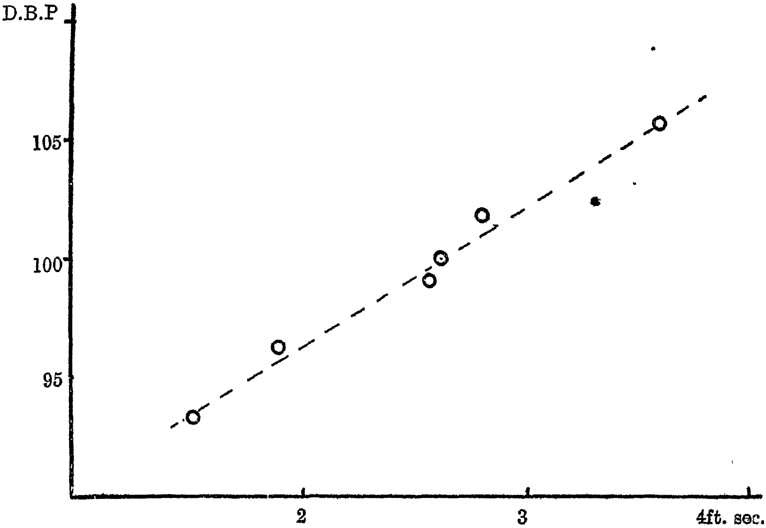

Fig. 1.—Relation between Drawbar Pull and Speed of Ploughing.

The remaining factor is the question of speed of ploughing. This is undoubtedly the most important, not in connection with the effect on the dynamometer record, which is relatively small, but with the general economics of land cultivation. This is considered in detail in a separate section below. The small direct effect of speed on the dynamometer record can best be seen from Fig. 1, which illustrates tests over the maximum range of the tractor. For convenience the value for normal or standard speed—2·5 ft. per second—has been put as 100. The test was made under rigid conditions so as to eliminate from the results such factors as soil variations which affect the drawbar pull, and each point on the diagram represents the mean value of about 9 comparisons between that speed and the standard one. It will be seen that the relation is linear and that the drawbar pull changes but little for a large change in speed. An increase from 2½ to 4 ft. per sec., for instance—which would mean an increase of 60 per cent. in area ploughed for a given time—only increases the drawbar pull by 8 per cent. For unavoidable changes of speed likely to occur in an experiment, the effect on the dynamometer record is therefore negligible.

II. A Test of Soil Uniformity.

The area selected for this test was a 6-acre portion of Sawyer's Field, which, except for one slight dell, was level and showed no obvious irregularities of any kind. The whole field had received uniform treatment for many years. The ploughing was done on a clover sod that had been twice cut for hay. The area was divided into square plots of one chain side and the boundaries in one direction were marked as ridges in setting out the ploughing lands. Since all the ploughing could not be done in one day, rather less than half of each land was ploughed before the dynamometer was attached. The test furrows therefore ran approximately through the middle of each half-plot. The experiment was done on a dull day in September, 1924, and the dynamometer records for each half-plot are the average of several contiguous furrows in each case. During the experiment, as a precaution to equalise the possible effect of such changes as drying out of the land on the drawbar pull, the whole field was systematically worked across twice. The weather conditions, however, were such as to make this possibility negligible. The final mean values of the drawbar pull for each half-plot are given in Table I. For convenience of reference the plot divisions were marked consecutively from 1 to 8 along one edge of the field and lettered from A to K along the adjacent edge, so that any plot can be specified by a combination of the appropriate number and letter.

A glance at the table shows that wide variations occur in the drawbar pull of different plots. These are not due to differences in moisture content across the field, as measurement of these values showed a remarkable uniformity. The general trend of the drawbar pull changes is best seen in a graphical form. In Fig. 2 regions of equal drawbar pull have been joined

TABLE I.—DRAWBAR PULL VALUES (LB.) ON SAWYER'S FIELD. RANSOME TWO-FURROW PLOUGH. AUSTIN TRACTOR.

Plot.	1	2	3	4	5	6	7	8
A. Down .	1,236	1,258	1,260	1,282	1,301	—	—	—
Up . .	1,233	1,260	1,275	1,277	1,335	1,383	—	—
B. Down .	1,293	1,296	1,282	1,304	1,409	1,428	—	—
Up . .	1,231	1,331	1,275	1,262	1,340	1,380	—	—
C. Down .	1,257	1,285	1,282	1,270	1,375	1,375	—	—
Up . .	1,342	1,287	1,328	1,337	1,456	1,419	—	—
D. Down .	1,380	1,337	1,345	1,470	1,529	1,475	—	—
Up . .	1,363	1,374	1,356	1,464	1,638	1,712	—	—
E. Down .	1,315	1,363	1,349	1,493	1,665	1,575	—	—
Up . .	1,378	1,386	1,444	1,544	1,513	1,537	1,500	—
F. Down .	1,296	1,333	1,368	1,384	1,477	1,507	—	—
Up . .	1,263	1,269	1,292	1,317	1,579	1,428	1,441	—
G. Down .	1,275	1,288	1,317	1,366	1,526	1,370	1,259	—
Up . .	1,236	1,249	1,294	1,333	1,522	1,394	1,265	—
H. Down .	1,232	1,246	1,275	1,382	1,329	1,359	1,273	—
Up . .	1,208	1,241	1,265	1,335	1,362	1,382	1,342	1,310
J. Down .	1,158	1,250	1,243	1,263	1,288	1,353	1,328	1,291
Up . .	—	1,082	1,171	1,220	1,250	1,190	1,238	1,209
K. Down .	—	1,174	1,215	1,218	1,225	1,242	—	—

by lines on a scale plan of the field. The figure thus has the appearance of an ordinary contour map, in which the "hills" and the "valleys" correspond to high and low drawbar pulls respectively. The method of drawing these contour lines was to assume that the mean value of the drawbar pull for each plot was the true one for the centre of the plot, and, further, that the drawbar pull gradient to the contiguous plots was quite smooth. Although this convention results in a considerable smoothing out of the smaller variations, which, as shown in the first section of this paper, could be perfectly legitimate deductions from the data, it has the advantage of focussing the attention on the really vital differences. The term "isodyne" has been adopted as a convenient description of these "contour" lines of equal drawbar pull.

The evidence of Table I and Fig. 2 is very significant, and shows that as far as the physical properties are concerned, an assumption of a uniform soil would have been far from correct. The range of variations in the drawbar pull is no less than 40 per cent. The question of the reliability of these results has already been considered in the preceding section, and no doubt arises on this score. In addition, the ease with which the isodynes could be drawn through the drawbar pull values is evidence of the constancy of the implemental factors during the experiment. Any such variations from furrow to furrow would show up as a tendency for the isodynes to run more or less parallel to the direction of ploughing, and it would be difficult to tell from Fig. 2 in which direction the ploughing was done. Only in the case of the F strip is there any such indication, and the direction of the isodynes here is partly due to the plough accidentally pulling out of its work, and some of the readings were affected in consequence. An additional proof of the reliability of the results was given by a statistical examination, in which the probable error for the values of the drawbar pull gradient from one plot to the next was calculated for a number of cases taken at random. The values ranged around 10–20 per cent., with a

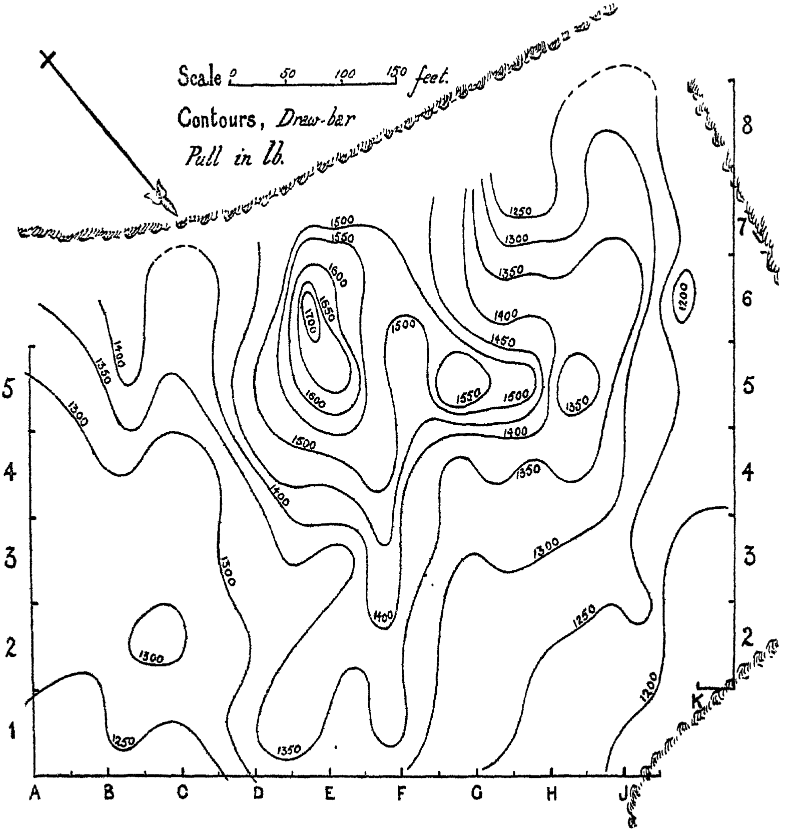

FIG. 2.—Distribution of Drawbar Pull (isodynes) over Sawyer's Field.

N.B.—Strip A extends between the points marked A and B, Strip B between the points B and C, and so on. The left half of each strip is the one denoted in Table I as ploughed "down," and the right half "up."

few exceptional cases, such as plots at the beginning of a furrow where irregularities are always greatest. The direction of the gradient therefore is always significant and its value is correct to at least one part in five.

The full implication of these results can be realised if this field had been used for a competitive implement trial, in which each plough would have been alloted to a strip running the whole length or width of the field. We can get a close approximation to the average values that would have been given by *the same plough* on each strip by comparing the averages for the columns (or the rows) in Table I. These values are shown in Table II.

TABLE II.—AVERAGE DRAWBAR PULL FOR STRIPS ACROSS THE WHOLE AREA.

Strip	A	B	C	D	E
Average drawbar pull, lb.	1,267, 1,297	1,335, 1,303	1,307, 1,345	1,423, 1,485	1,460, 1,479

Strip	F	G	H	J	K
Average drawbar pull, lb.	1,394, 1,370	1,343, 1,328	1,299, 1,306	1,272, 1,194	1,215

Strip	1	2	3	4	5	6	7
Average drawbar pull, lb.	1,276	1,279	1,297	1,343	1,428	1,417	1,337

These results show that, in spite of the additional smoothing due to averaging the drawbar pull for the whole length of the strip, very considerable differences still remain. If the lowest value for drawbar pull in each of the two sets of strips be taken as standard, the increase in drawbar pull rises to a maximum of 12·4 per cent. or 11·2 per cent. according to whether the strips were taken up and down or across the field. The gravest injustice would have been done had the field been used for a comparative test of different ploughs, since differences in drawbar pull of as much as 11–12 per cent. would have been due, not to any merit of design, but solely to the chance of which particular strip of the field was allotted to each implement. When one remembers that even in the present stage of development of power-drawn implements, the immediately attainable reduction in draught due to improvement in design is not likely to exceed 5 per cent., there is obvious danger in assuming that because a field looks uniform it is in reality so, and is therefore suitable for such trials.

Hence, in any such work special precautions are necessary if reliable results are to be obtained. The most desirable solution would be to find, by a preliminary trial, an area over which the dynamometer values are reasonably uniform. Such areas do exist; in fact one field less than 600 yards from the one considered above showed great regularity, the drawbar pull over a considerable portion having a variation of only two or three parts per thousand. There was no *a priori* reason to expect this uniformity, especially as the field has for many years been in use for manurial experiments. In the event of a uniform field not being available, two methods may be suggested for eliminating the effect of soil variations in a competitive implement trial. One method would be for one furrow to be ploughed by one implement, the next by another, and so on in turn until the work was finished. Since, as shown above, the natural soil variations from one furrow to the next are comparatively small, a comparison could safely be made between the drawbar pull of one implement for a given furrow, and that of another implement for the immediately adjacent furrow. For each pair of implements there would be a number of these comparisons of contiguous furrows at regular intervals across the field, and the averages of these would give a reliable indication of the respective draughts of the two ploughs. A similar comparison would be made between the second and the third implement, the third and the fourth, and so on.

An alternative course is to make a preliminary survey of the whole area, using one plough, and to construct from the results an isodyne map as indicated above, which would be used to correct the recorded draughts of the competing implements for the effects due to the soil variations. In this type of trial each implement would be allotted to a separate strip or "land." The preliminary survey could not be made immediately before the trials for obvious reasons. In some cases it could be made some little time before, and the competing implements set to work the cross furrows, but usually the preliminary survey would have to be made in the previous season. The question at once arises whether the isodynes are permanent or whether their position differs from one ploughing to another, owing, for instance, to seasonal factors. Although a full answer to this question is not yet possible, dynamometer records that have been obtained on other fields at Rothamsted in successive seasons indicate that no serious seasonal effect is likely to occur, provided the whole field has been treated uniformly in the matters of cultivation, manuring, and cropping in the interval. Any such effect is more likely to show as a proportionate raising (or lowering) of the drawbar pull values over the whole area rather than in any serious differential effect between regions of high and low drawbar pull. This question will, however, be followed up in detail.

In addition to their important bearing on implement trials, the above results must be considered in their relation to field experiments. The drawbar pull variations are a reflection of corresponding changes in the physical properties of the soil over the field, and such properties have an influence on the growth and yield of crops. Hence in field experiments the yields for any one plot will be the resultant of the inherent soil and climatic conditions and the particular manuring. We have already mentioned that in modern field plot technique it is necessary to have a considerable number of replications of any given treatment, to arrange for a random distribution of the plots, and to submit the results to a special statistical analysis. Unless these precautions are taken errors will occur great as those already discussed for implement trials. On the other hand, if the direct relation between the soil conditions and the yield of the crop be known, it may be possible either to reduce the number of plots for each manurial treatment—with a corresponding saving in labour and expense—or to obtain, with the same expenditure of effort as before, a more accurate result.

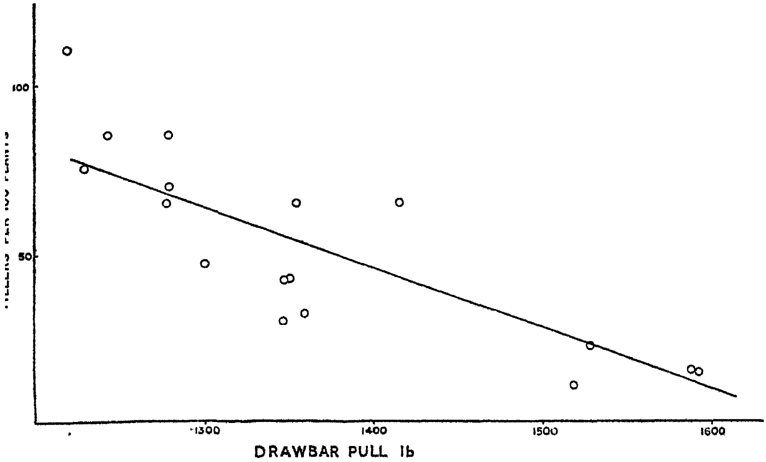

FIG. 3.—Relation between Drawbar Pull and Tillering Percentage.

The portion of Sawyer's Field used for the uniformity trial is therefore being kept under close observation from this point of view. After the dynamometer measurements were made the land was prepared for winter wheat. Measurements made by Messrs. T. Eden and E. J. Maskell on sixteen representative plots showed that a close relationship existed between the early stages of plant growth for each plot and the corresponding drawbar pull. Thus the number of plants present on a given plot (i.e. the number surviving the winter) was greatest on those plots that had low values for the drawbar pull. Measurements at a later stage showed that the percentage of plants that had tillered on each plot was also closely inversely related to the drawbar pull. The degree of correlation can be seen from Fig. 3, in which the percentage of tillered plants is plotted against the corresponding drawbar pull. It is not usual in field experiments to obtain such close relationships. As the plants increased in size the close relationship between growth and drawbar pull gradually disappeared. Although there were considerable variations in the figures for grain and straw over the complete range of plots, they did not show the statistically significant relation to drawbar pull of the earlier measurements. Whether this indicates that the physical factors become of less importance, or whether other factors, such as spacing and competition, become predominant in the later stages of growth, cannot be determined without further work over a range of seasons. The past season was abnormal in certain respects, and some natural differences from plot to plot were in all probability greatly accentuated, while others were reduced.

III. Some Economic Aspects.

In Section I, dealing with the evolution of a reliable dynamometer technique, the question of the speed of the implement was mentioned. It was shown that for ploughing, an increase of the speed from 2½ miles per hour to 4 miles per hour—an increase which would mean a 60 per cent. greater area ploughed in a given time—was attended by only 7 per cent. increase in the drawbar pull. It is highly unlikely that the cost of the extra fuel needed for this purpose would be more than a small fraction of the saving in labour costs per acre resulting from the increased speed. Hence increased speed should mean considerable saving in expense. With our present implements a limit is set, however, by the bad work done by a plough moving too quickly, and by the excessive wear and tear on the tractor. There is therefore a promising future for implements and tractors which would work at higher speeds, and the necessary modifications in design and the confirmatory experiments should be well within the scope of the agricultural engineer, especially as speeds of six miles per hour have for many years been employed in steam cultivation.

In arriving at the precise significance of increased speed in reducing costs it is necessary to pay careful attention to the method of comparing the results. The usual expression for the work done—force multiplied by distance, or in our case, drawbar pull multiplied by distance ploughed—is not suitable, since it does not take into account the manner in which the drawbar pull is produced by the tractor. The matter may be illustrated by considering the case of ploughing up and down the same slope with all controls kept constant. We have already seen (p. 33) that the drawbar pull is practically the same in both directions. Hence, if the usual expression for work done—force multiplied by distance—were employed there would be no appreciable difference in the two values. But the total power output of the tractor is very different in the two cases and shows up unmistakably in the slower speed of ploughing uphill. As another illustration, consider the simple case of ploughing on the flat. The same value would be given for the work done if drawbar pull multiplied by distance ploughed were used, whether the tractor wheels were slipping or not, whereas the power output would be greater in the former case. These considerations show that the measurement should be made on a time, rather than a distance, basis, and we have used the product of the drawbar pull and the time in seconds taken to plough a 1-ft. length of furrow as a measure of the output. This product can be called the "power-factor." By its definition it is obviously closely related to the fuel consumption, and we are now investigating this point. The assumptions involved in taking the power-factor as equivalent to fuel consumption are: (1) that over the normal rating of the tractor engine a given drawbar pull corresponds to a certain rate of fuel consumption, and (2) that this rate is simply proportional to the drawbar pull. The direct and accurate measurement of fuel consumption, especially in short runs, is somewhat laborious, and the power factor has therefore certain advantages since it is automatically obtained from the traces on the dynamometer chart.

The power factor is of special use in comparing the results given by the same tractor and plough in any one series of experiments, and since it includes the speed it is a more sensitive measurement than drawbar pull alone, which we have already seen is but little affected by speed changes. It is also of use in comparing relative costs in experiments where different implements and soils are involved.

GENERAL CONCLUSIONS.

Provided that careful attention is given to adjustments in the dynamometer, the variations in drawbar pull obtained on the chart can be definitely ascribed to variations in the soil resistance. A careful examination was made of the effects on the drawbar pull produced by changes in various factors that might alter during the course of an experiment. Variations in hitch and set of the implement have no measurable effect on the drawbar pull unless the depth of working is affected. Tests on adjustment of depth alone showed that over the normal range the drawbar pull was proportional to depth. The slope of the land is without effect on the drawbar pull for gradients up to 1 in 40. The effect of speed is also slight, and an increase from 2½ to 4 miles per hour—which means a 60 per cent. greater area ploughed in a given time—occasions only a 7 per cent. increase in drawbar pull. It is unlikely that the cost of the extra fuel needed to sustain this 7 per cent. increase would be more than a small fraction of the saving in wages, etc. In many districts the opportunities for autumn cultivation are restricted, and it is imperative to take advantage of every opportunity if the winter-sown crops are to be got in. This is an additional reason why the question of increased speed of working of tractors and implements should be seriously taken up by agricultural engineers and designers.

In this type of investigation some measurement in addition to drawbar pull is necessary. The usual expression for work done is the product of the force and the distance, which in the present case is the drawbar pull multiplied by length of furrow. This is unsuitable since it does not take into account the special manner in which the drawbar pull is produced by the tractor. We have therefore employed the "power-factor," which is defined as the product of drawbar pull and the time (in seconds) taken to plough one foot length of furrow. In many cases this factor is more sensitive than drawbar pull alone. It is closely related to fuel consumption and can therefore be used when the costs of various operations are being compared.

With the evolution of the reliable dynamometer technique described in Section I, it became possible to study the degree of uniformity of soil resistance on different fields. The results showed that visual inspection was quite unreliable as an indication of uniformity. Thus, on one field that would have been unhesitatingly accepted by a committee of practical men as quite suitable for competitive implement trials, there were gross variations in drawbar pull, while on another field, less than 600 yards away, the drawbar pull was remarkably uniform. The variations in the former field were more than sufficient to have masked any differences due to superior design, and had the results been used as a basis of assessing the relative merits of the competing implements, the gravest injustice would have been done. There is therefore a necessity for a preliminary dynamometer survey before such a trial, or, alternatively, special means must be adopted in the trial for distributing the soil irregularities fairly among the competing implements. These differences in drawbar pull persist from year to year, and their general distribution is not affected, but it is not yet certain whether seasonal effects bear equally on all types of soil and systems of manuring.

The essential importance of a reliable dynamometer technique and a previous knowledge of the variations across the proposed test-field do not appear to have been hitherto realised. This is a disconcerting thought, since it has been generally understood that these trials are thoroughly practical and provide data from which reliable answers to both economic and practical questions can be given.

The changes in drawbar pull across a field are a reflection of corresponding changes in the physical properties of the soil. The latter have an effect on the growth of plants, hence we find a relationship between drawbar pull and plant growth, especially in its early stages. Thus the number of plants of winter-sown wheat that survived the winter was greatest on those plots having the least drawbar pull, and the same relationship held for percentage of tillered plants. As growth proceeded, the closeness of the relationship fell off, until at harvest, although there were considerable differences in yield from plot to plot, they were not related significantly to the drawbar pull. The experiments discussed in this paper are being continued over a complete rotation in order to ascertain the effect of season on the results from the point of view of the soil and the response of different crops.

I am indebted to the Cambridge University Press for permission to reproduce Figs. 1 and 2, which have already appeared in the *Journal of Agricultural Science.*

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A NOTE ON THE COST OF MOLE-DRAINING.

Mole-draining is of particular interest at the present time when no other form of land drainage is financially possible, and it would be of great value to farmers if details of the cost of the different processes in use were available. The days when the work was done by a cable and windlass are gone, probably for ever, and though there are those still living who remember the time when teams of ten, twelve and even sixteen horses, harnessed direct to the plough, supplied the necessary power, it is unlikely that this motive force can compete on equal terms with mechanical power to-day. In fact, for practical purposes it may be said that the means available to the farmer desirous of mole-draining are limited to three: (1) direct haulage by the agricultural tractor; (2) haulage by cable and two steam-engines (on the principle of the steam plough); (3) haulage by cable and one engine, a horse team being employed to draw out the cable and to bring the mole-plough down to the starting-point of each drain.

Comparative data as to the present-day cost of these three methods do not appear to have been collected.

The probability is that work done by the agricultural tractor is the cheapest, and that in many cases, where conditions are favourable, direct haulage is also the best. No generalisations, however, are possible, and in other cases there is no doubt that certain advantages may be claimed for the use of steam power applied through a steel cable by a stationary engine. These may be summarised as follows :—

1. Greater power is available, resulting in a more even and steady pull on the mole-plough. The pull is independent of the nature and condition of the surface, and the drains can be carried through boggy land which would not support a tractor. A mole of greater diameter can be used, and the drains can be made deeper where desirable.

2. The plough can be more easily driven in a straight line; the drain is thus more efficient and less liable to become silted up, there being fewer bends to check the flow of water and thus to cause deposit of sediment.

3. Less injury is done to the land by the draining operations. Since draining is best done in winter when labour is available, and when the soils are most easily damaged by such a heavy machine as a tractor, this is a point of considerable importance.

Of course, the relative advantages of haulage by tractor and by steam power depend on the circumstances of each case. Where the fields are large, and the slopes uniform, steam haulage would seem to have the advantage both in point of efficiency of working and of economy. The greater diameter of the mole and the straighter drains would tend to prolong their useful life, and any consideration of cost is manifestly incomplete without taking this factor into account. Where, on the other hand, the fields are small and the slopes irregular, but where the surface is firm, direct haulage by tractor has certain obvious advantages on account of its being less cumbersome.

For mole-draining by steam power it is not necessary to employ two engines as in steam ploughing. In fact, there is a definite advantage to be got by using a single engine passing along the highest part of the land to be drained and pulling the mole-plough through the ground to itself. The implement is dragged back to the lower end of the field by a team of horses while the engine is moving on to the next position. By the courtesy of Mr. A. H. Cornish, of West Farm, Eaton, Berkshire, it is possible to supply full costs and details of mole-draining carried out by him in this way on 87 acres of low-lying grassland adjoining the river Thames during the spring of 1925. In the fields dealt with the subsoil consists of typical Oxford clay, and it is interesting to note that the same fields were previously

FIG. 1.—Ploughing out Furrow Slices along the Lines of the Drains.

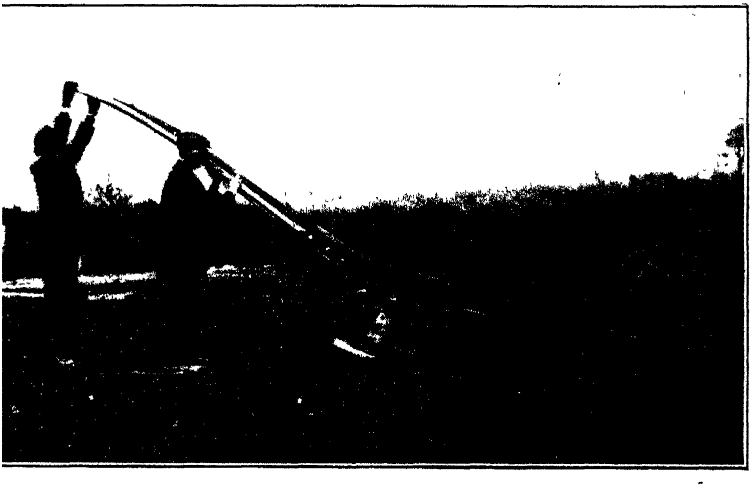

FIG. 2.—Mole-plough ready to enter the Ground.

FIG. 3.—Steering the Plough.

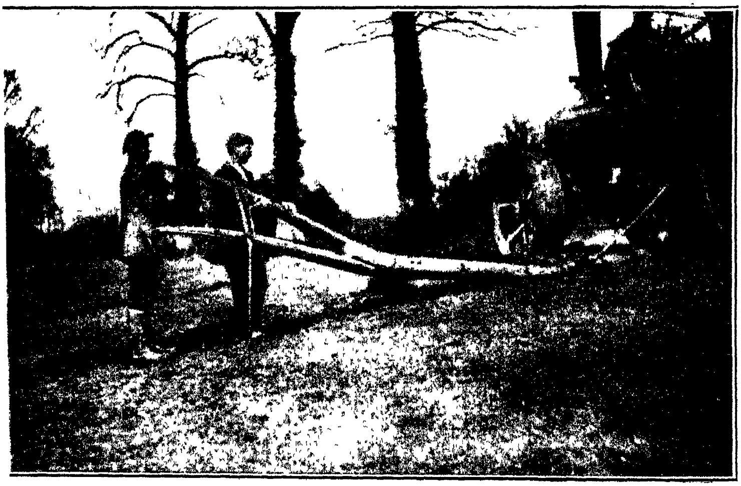

FIG. 4.—Plough leaving the Ground at the Head of the Drain.

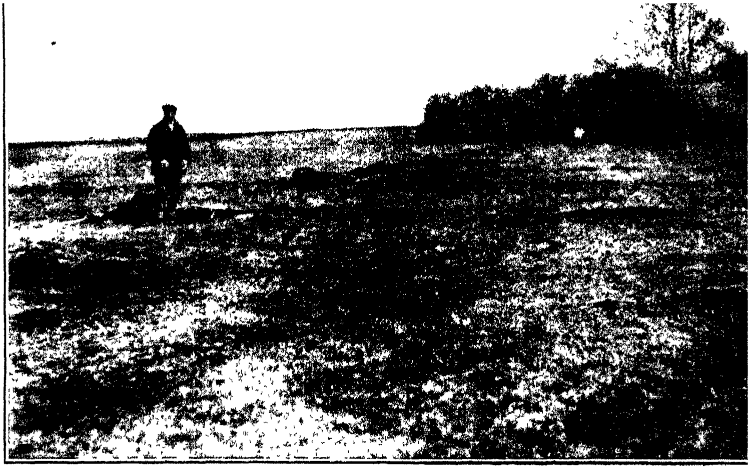

Fig. 5.—View of Field showing Mole Ends opened out for connection with Ma

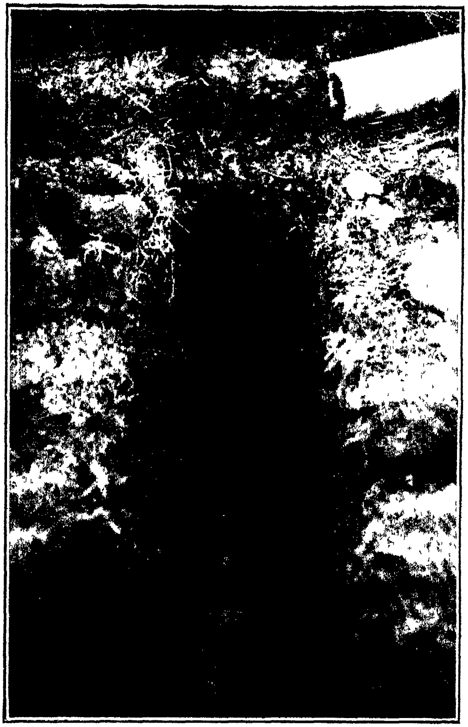

Fig. 6.—Mole End opened out ready for connection with Main.

mole-drained by Mr. Cornish's father in 1882, and that some of the old drains were running freely in 1925. The old mole-drains were drawn at a depth of 18 in., the diameter of the bore being 3½ in. Their remarkable efficiency may be attributed to these factors together with the character of the subsoil.

Method of Operation.—All the fields were grass-land, and the work was commenced early in April. In the first place, the course of the mole-drains was marked by turning over a furrow slice with an ordinary plough; this acted as a guide for the haulage cable and provided a groove in which the beam of the mole-plough rested. An old-type plough was used, made by a local wheelwright, the mole being 3½ in. in diameter and set to work at a depth of 18 in. Three horses were used to drag the plough to the point where the mole should join the main drain. The mole was made to enter the ground by raising the stilts and starting to wind the cable. The number of men required to control the plough varies according as to whether the course of the drains is straight or curved. In the former case two men were needed, whereas up to six men might be required in the latter case, three of whom would be employed in keeping the haulage cable in the furrow by the use of stakes, while the others controlled the course of the plough by exerting leverage by means of poles passed through the stilts.

After the moles were drawn, the furrow slices turned over at the beginning were turned back, straightened out and rolled. Mr. Cornish states that the extra cost involved in this operation is amply justified by the results. The cut made by the mole-plough is in this way covered up and the turf consolidated over it. In the event of a dry spell during the following summer these cuts are liable to gape rather badly, and falling earth may choke the drains; when covered over in the above manner this danger is to a great extent eliminated. The actual drawing of the moles was completed in four days, *i.e.* at a rate of nearly 22 acres per day.

Pre-existing mains were utilised practically throughout. In one field, however, it was found necessary to put in a new main, and to provide an artificial fall. Old mains are often to be met with in land requiring drainage, and their use, when possible, effects a material economy. Pipes were laid in the mole-ends at the points where they joined the mains, sometimes three or four only being needed; in wet ground, however, the bores were opened out, and pipes carried through to the firmer soil. All the outfalls were walled up on the ditch face, and new pipes inserted at the outfall ends of the mains, provided with iron gratings fixed in cement in the walls to prevent the entrance of rabbits, etc.

Cost.—The consideration of cost involves an appreciation of the position of the farm relative to the proximity of a railway station and to sources of supply. This has an important bearing on the cost of carting and on the price of various articles required. In this case materials had to be carted five miles.

In the following statement the costs have been divided as follows: (i) cost of mole-draining; (ii) cost of mains, main connections and outfalls; (iii) cost of incidental works. Nothing has been charged for supervision, which was undertaken by Mr. Cornish himself.

(i) COST OF MOLE-DRAINING.

		£	s.	d.	£	s.	d.
Ploughing out furrows	Man days, 4 @ 5/6	1	2	0			
	Boy days, 4 @ 2/6	0	10	0			
	Horse days, 12 @ 3/6	2	2	0			
					3	14	0
Hire of engine		19	0	0			
Coal consumed	2 tons @ £2	4	0	0			
Carting coal	Man days, 2 @ 5/6	0	11	0			
	Horse days, 2 @ 3/6	0	7	0			
					23	18	0
Attending mole-plough	Man days, 18 @ 5/6	4	19	0			
	Horse days, 12 @ 3/6	2	2	0			
					7	1	0
Turning back furrows	Man days, 3 @ 5/6	0	16	6			
	Horse days, 3 @ 3/6	0	10	6			
Straightening up furrows	Man days, 11½ @ 5/6	3	3	3			
Rolling furrows	Man days, 2 @ 5/6	0	11	0			
	Horse days, 4 @ 3/6	0	14	0			
					5	15	3
Allow for use of implements					2	0	0
Total Cost of Mole-draining					£42	8	3

(ii) COST OF MAINS, MAIN CONNECTIONS AND OUTFALLS.

		£	s.	d.	£	s.	d.
Opening mains and main connections and constructing outfalls:—							
Farm hands	Man days, 9 @ 5/6	2	9	6			
Two drainers	744 hours @ 10*d.*	32	5	0			
					34	14	6
Cost of pipes	900 × 2 in. 250 × 3 in. 350 × 4 in.	13	15	0			
Carting pipes 5 miles	Man days, 9 @ 5/6	2	9	6			
	Horse days, 9 @ 3/6	1	11	6			
					17	16	0
Filling in mains and main connections	Man days, 31 @ 5/6				8	10	6
Carting stones for outfall ends	Man days, 1 @ 5/6	0	5	6			
	Horse days, 1 @ 3/6	0	3	6			
					0	9	0
Iron gratings for outfall ends					1	0	0
Total Cost of Mains, Main Connections and Outfalls					£62	10	0

(iii) COST OF INCIDENTAL WORKS.

		£	s.	d.	£	s.	d.
Hedge Brushing	Man days, 6 @ 5/6				1	13	0
Deepening ditches	Man days, 10 @ 5/6				2	15	0
Fencing off outfalls	Man days, 6 @ 5/6	1	13	0			
40 oak fencing posts		3	0	0			
1 cwt. wire		1	4	0			
Carting fencing posts	Man days, 2 @ 5/6	0	11	0			
	Horse days, 2 @ 3/6	0	7	0			
					6	15	0
Total Cost of Incidental Works					£11	3	0

SUMMARY OF TOTAL COST OF DRAINING 87 ACRES.

	Total.			Per cent.
	£	s.	d.	
i. Mole-draining	42	8	3	36·2
ii. Mains, Main Connections and Outfalls	62	10	0	54·4
iii. Incidental Works	11	3	0	9·4
	£116	1	3	100·0

The cost per acre amounts to £1 6*s.* 8*d.*, and it will be noted that little more than one-third of it is attributable to the actual process of mole-ploughing and work incidental thereto. Were it not for the fact that the existing mains were largely serviceable again the cost of the second item would have been much higher and the percentage cost of the mole-ploughing would have been lower still. On the other hand, expenditure on incidental works will vary according to circumstances and might be reduced in some cases, but it is difficult to conceive any practical instance where these charges will be entirely absent, even though items such as hedge-brushing and ditching be regarded as belonging to the normal farm expenses.

Few people, probably, realise how the cost of the work subsidiary to the main operation mounts up. The connection of the plough bores with the mains; the construction of mains and outfalls; the incidental work such as fencing off outfalls, deepening ditches, &c., these things constitute the larger part of the job. In fact, the actual drawing of the mole-plough through the land may represent less than one-fifth of the total cost of draining the field. In these circumstances there is a danger of overemphasising the economy of this or that method of making the bores, for the greater part of the total cost remains the same for every process, and thus it may happen that the most efficient method is passed over in an attempt to secure what is really only a trifling advantage in cost. In cases similar to that described above, where there were old mains still serviceable for the most part, it is likely that the agricultural tractor would be a cheaper and more convenient motive power than the steam engine, though on the land in question parts of the fields would have been too soft to carry a heavy tractor, and the steam engine and cable was the only method possible. The accompanying plan, showing the lay-out of the work, marks the occurrence of boggy land where the moles themselves had to be opened up for half a chain or more, and piped, and in these places a tractor would soon have dug itself in.

The work described in this note affords a valuable example of what can be done by enterprise and ability. The plough (*see* Fig. 2) was made locally, some years ago, to the specification of Mr. Cornish, senr., who had the mole itself manufactured in Sheffield. The engine was hired for the occasion, thus saving contract profits, and the whole planning and supervision was undertaken by Mr. A. H. Cornish himself. The writers desire to record their great obligation to him for the care with which he recorded the various operations and their cost, and for his kindness in allowing the figures to be made available for general information. They also have to thank their colleague, Mr. G. Frecheville, for the illustrations reproduced in the article.

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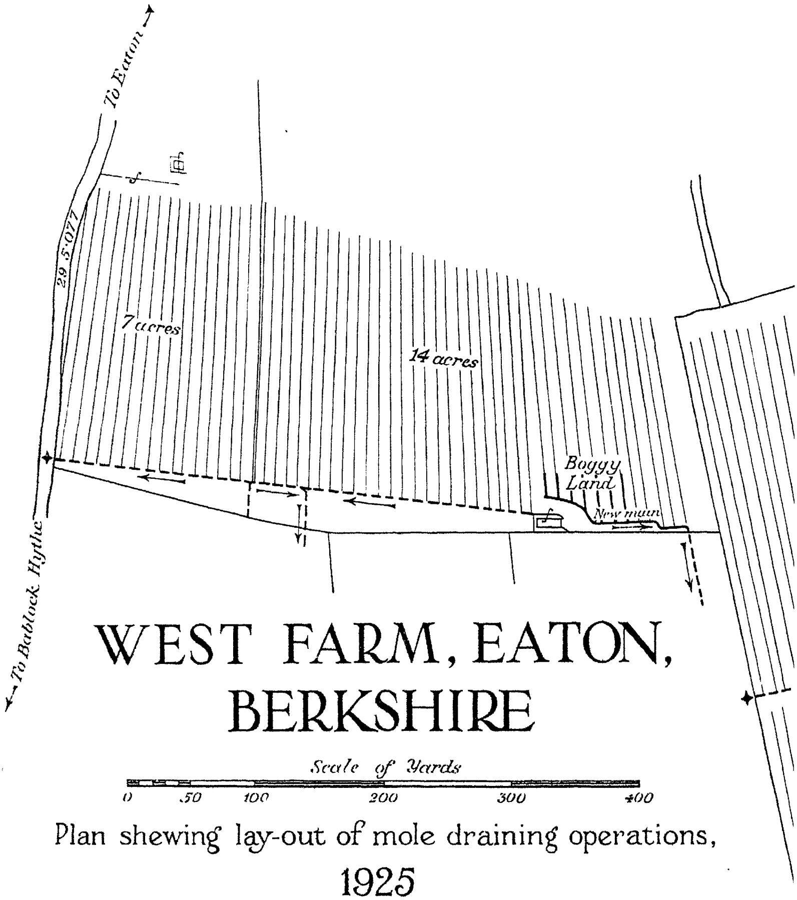
THE COMPARATIVE COST OF MANGOLDS AND SILAGE.

ONE of the most interesting developments in cattle-feeding practice of recent years has been the increase in the use of silage as a substitute for the whole or some part of the root crop. As a food-stuff it was not unknown to an earlier generation, for considerable attention was given to the manufacture of grass silage in substitution for hay following the wet years associated with the earlier stages of the great Agricultural Depression. The grass was cut and carted while still green into stacks, where it was weighted down with earth and stones or otherwise consolidated by some mechanical means. Even to-day simple machinery in the form of winches used for straining wire ropes laid over these grass stacks are to be met with here and there lying about the stack yard, and quite good silage was made by these means. But the process obtained no permanent place in English farm management. Summers in which hay cannot be got are rare, and silage cannot replace the hay crop for every purpose in live-stock feeding. This form of fodder has now,

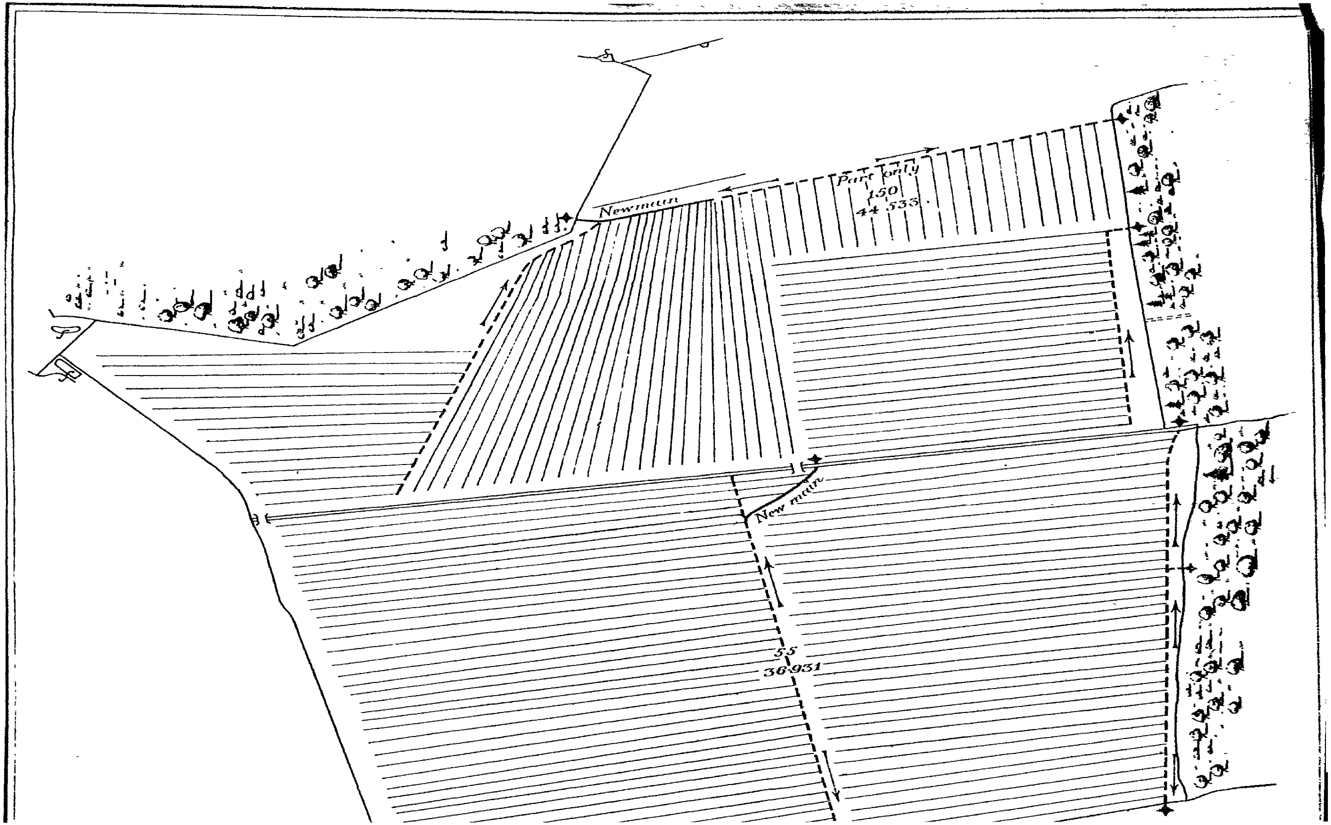


WEST FARM, EATON, BERKSHIRE

Plan shewing lay-out of mole draining operations, 1925

Pre-existing mains used again are indicated by broken lines and new mains by solid lines. The positions of outfalls are marked ✦. The arrows shew the direction of flow in the mains.

Total area drained = 87 acres.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however, reappeared in another shape. Following an American practice, a number of farmers are now diverting part of their root break to the growth of special crops for ensiling. Grass is no longer used, but mixtures of legumes and white straw crops, maize, etc., are cultivated expressly for this purpose. Another variation in the earlier practice is concerned with the silo. Stack silage, clamp silage and pit silage are still produced, but probably the larger number of those who are engaged in its production erect a structure especially to hold it, constructed either of wooden staves or of reinforced concrete. The green crop for filling these silos is passed through a chaff-cutter and then delivered through a blower into the silo.

There is no doubt that farmers who are going in for this practice are impressed by the high cost of root growing under present labour conditions. The cultivation necessary for cleaning the land, the operations of horse-hoeing, singling and side-hoeing, the clamping of roots and subsequently cutting them for stock all combine to make the root crop very expensive to the farmer. On the other hand, the bulky silage crops grown in substitution for it eliminate much of this work. It is true that the seed costs more, but there must be a considerable saving on manures and cultivations. Against this, however, must be set the cost of cutting and carting heavy crops of green fodder and of chaffing them and filling the silos, not to mention the charge for interest and depreciation on the capital invested in the silo itself (*see* p. 58), which may be very heavy in the case of a wooden structure.

As to feeding value, much useful work has been done at Cambridge and elsewhere [1] on the relative value of silage and root crops, and there seems to be no doubt that silage can be substituted quite successfully for a crop such as mangolds in the compilation of feeding rations both for cattle and for milking cows. Thus, what is now required is the compilation of data on the comparative costs of roots and silage. The farmer knows that he can grow a heavy weight of fodder crops ; he knows that silage made from them can be introduced into a feeding ration as a substitute, in whole or in part, for roots, with satisfactory results so far as the production of meat or milk is concerned. The point upon which he still waits to be informed is the financial advantage, if any, attaching to the substitution.

Upon this important question practically no work appears to have been done, and in view of the growing interest in silage it is desirable from every point of view that information on this head should now be collected as widely as possible. Nor is the question merely that of compiling costs for growing and handling the alternative foods ; there is also the important question of the amount of loss incurred between the times of harvesting and of feeding the crops. How many farmers realise that the weight of green material filled into the silo may be as much as 50 per cent. more than the weight of silage ultimately fed to the stock ? Yet there is good reason (see *post*) to believe that this is often the case. The advantage of any new process in farm management, or of any variation of established processes, cannot be regarded as having been demonstrated merely by showing that it is technically possible and scientifically sound ; it is vital to show, at the same time, that it is economically advantageous to the farmer.

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[1] "Crops for Ensilage," A. W. Oldershaw, *Journal of the Royal Agricultural Society,* Vol. 84 (1923).

It cannot be claimed for silage that the demonstration of its usefulness has reached this point. The technical and scientific problems involved in its production have received much attention, but the economic problem has still to be attacked. The object of this article is to draw the attention of investigators to this aspect of the work, as the only recorded case where any comparative figures have been collected raises a very serious doubt as to the economy of silage production. During the three years, 1922, 1923 and 1924 careful costing of silage and of mangolds was undertaken on the South-Eastern Agricultural College Farm at Wye, and the figures are anything but favourable to silage regarded as a cheap food. For purposes of comparison the costs have been divided into : (1) those incurred in growing the crop ; (2) those incurred in subsequently handling it ; (3) overhead and general expenses ; and the results obtained are indicated in the following Tables I and II :—

TABLE I.

COST OF MANGOLDS (1922–24).

	1922		1923		1924		Average of 3 years	
	Per acre	Per ton	Per acre	Per ton	Per acre	Per ton	Per acre	Per ton
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivations, etc.	14 3 10	0 11 7	11 18 7	0 13 1	12 17 4	0 5 10	12 19 10	0 9 0
Handling the crop . . .	3 10 0	0 2 10	5 18 3	0 6 5	6 3 7	0 2 10	5 4 0	0 3 7
Overhead and general expenses	1 8 8	0 1 2	1 18 9	0 2 1	2 14 6	0 1 3	2 0 8	0 1 5
Total . . . £	19 2 6	0 15 7	19 15 7	1 1 7	21 15 5	0 9 11	20 4 6	0 14 0

TABLE II.

COST OF SILAGE, 1922–24.

	1922			1923			1924			Average of 3 years		
	Per acre	Per ton		Per acre	Per ton		Per Acre	Per ton		Per acre	Per ton	
		Green	Fed		Green	Fed		Green	Fed		Green	Fed
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivations, etc.	5 18 4	0 14 3	1 4 8	9 6 3	0 18 7	1 5 6	4 11 5	0 10 2	0 14 4	6 12 0	0 14 8	1 1 5
Handling the crop	1 17 8	0 4 6	0 7 10	4 8 0	0 8 10	0 12 1	4 5 10	0 9 6	0 13 5	3 10 6	0 7 10	0 11 4
Overhead and general expenses	3 16 0	0 9 2	0 15 10	4 8 6	0 8 10	0 12 1	5 14 10	0 12 9	0 17 10	4 13 1	0 10 4	0 15 1
Total . . £	11 12 0	1 7 11	2 8 4	18 2 9	1 16 3	2 9 8	14 12 1	1 12 5	2 5 7	14 15 7	1 12 10	2 7 10

TABLE III.

SUMMARY OF YIELDS (PER ACRE) AND COSTS (PER TON) OF MANGOLDS AND SILAGE, 1922–24

	1922		1923		1924		Average of 3 years	
	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost
	Tons	£ s. d.	Tons	£ s. d.	Tons	£ s. d.	Tons	£ s. d.
Mangolds	24·5	0 15 7	18·3	1 1 7	44	0 9 11	29	0 14 0
Silage: (a) Green . . .	8·3	1 7 11	10	1 16 3	9	1 12 5	9	1 12 10
(b) Fed	4·8	2 8 4	7·3	2 9 8	6·4	2 5 7	6·2	2 7 10

An examination of the acreage costs for the two crops makes it quite clear that the growth of mangolds required a much greater outlay, the average cost of this crop over the three years (£20 4*s.* 6*d.*) being nearly 50 per cent. more than the average cost of silage (£14 15*s.* 7*d.*). The difference between the cost incurred in seeds, cultivations and manures for the two crops is even more striking, those necessary for mangolds (£12 19*s.* 10*d.* per acre) being practically 100 per cent. above those for silage (£6 12*s.*). These figures confirm the general impression prevailing amongst those who have grown the two crops, namely that mangolds are relatively the more costly. But at the same time they afford a very good example of the danger of drawing general conclusions from incomplete data. Until the total cost has been related to the yield in either case nothing can be asserted as to the economic advantage of one crop over the other, and in the case of the Wye farm the yields of the two crops were as shown in Table III.

Not only is the yield of the mangold crop 300 per cent. more on the average, than that of the silage crop as delivered into the silo, but there is a loss of weight between the date of filling the silo and the use of the crop for stock feeding amounting to no less than 33 per cent. There is no reason to suppose that there were any exceptional circumstances in the case of the Wye farm to account for this; similar results have been obtained in several other parts of the country. Thus the effective weight of the mangold crop is raised to nearly 500 per cent. above that of the silage crop, with the rather remarkable effect upon the cost *per ton* as contrasted with the cost *per acre* which is disclosed in Tables I and II.

It is not suggested that the actual costs on the Wye farm are average costs for the two crops, nor that the wide difference between the ton costs is an average difference. It must be noted that the 80-ton silo at Wye was erected some five years ago, at a cost of £380, complete with cutter and blower, whereas it is stated that a structure to contain 150 tons of green silage can be built to-day for £330 complete. Again, it must not be overlooked that silage has advantages in its higher feeding value, and in the way of convenience in handling without further preparation, for which no credit is given in the figures. There is, too, another factor which may have a very important bearing on the comparative economy of roots and silage, although it would be very difficult to measure it in figures. This is the effect of either crop on the general economy of farm management. The difficulty of getting a tilth in the spring after late-folded roots is not uncommon, and even with the mangold crop after-cultivations and corn sowing are not always done under the best conditions. On the other hand, the early removal of the silage crop admits of a bastard fallow and early autumn sowing of corn crops under the most favourable conditions, and thus the silage crop, though relatively expensive in itself, may more than justify its place by its beneficial reactions on the cultivation of the following crop. To judge from the experience gained so far, it seems probable that silage as an alternative to root crops is likely to find a permanent place in crop rotations in those districts, principally, where a low average rainfall renders the root crop uncertain.

Such considerations as these tend only to emphasise the need for further investigation of the economics of ensilage suggested by the figures for relative costs contained in the Tables above, in order that its position in farming economy may be more clearly determined. One thing is certain, namely that more attention must be paid to experiment with bulkier silage-making crops. The primary cause of the heavy cost of silage at Wye is its low yield relative to the mangold yield. The need for bulk has been emphasised by American writers, and crops such as maize and sunflowers will give nearly twice as much weight as the popular oat and legume mixtures. It may be that work along this line would go far to establish the economic position of silage as a farm food, quite independently of its value, indiacted above, as an aid to efficiency in the general management of the arable land of the farm.

For the information of those who desire to go more closely into the figures summarised in the foregoing Tables, full details of the costs of the two crops grown at Wye during the three years are appended, together with some explanatory notes.

H. W. KERSEY.

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APPENDIX

DETAILS OF COST OF MANGOLD GROWING—1922, 1923 AND 1924

PER ACRE.

	1922	1922	1923	1923	1924	1924	Three Years' Average	Three Years' Average
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
CULTIVATIONS, ETC. :—								
Subsoiling	—		—		0 9 7		0 3 2	
Plough	1 2 10		1 1 9 (Part tractor, part horse)		0 15 10 (Part tractor)		1 0 2	
Disc harrow	—		0 3 4 (Tractor)		0 3 6 (Tractor)		0 2 3	
Broadshare	0 8 9 (Part only)		0 8 6 (Part only)		0 10 0		0 9 1	
Cultivate and cultipack (tractor)	0 16 4 (Twice)		0 11 5		—		0 9 3	
Harrow	0 1 6		0 5 6 (3–4 times)		0 2 2		0 3 1	
Roll	0 2 9		0 1 7		0 4 8 (Twice)		0 3 0	
Seed	0 6 3		0 5 6		0 5 7		0 5 9	
Drill	0 3 7		0 2 11		0 3 9		0 3 5	
Dung, less residual value	6 2 3		4 7 5		5 0 11		5 3 6	
Artificial manures, less residual value	2 0 8		2 9 7		2 17 3		2 9 2	
Set out, single, hand-hoe	2 14 7 (Very foul, Day-work)		1 13 8 (Piece-work)		1 12 1 (Piece work)		2 0 1	
Horse-hoe	0 4 4		0 7 5 (Twice)		0 12 0 (4 times)		0 7 11	
		14 3 10		11 18 7		12 17 4		12 19 10
HANDLING THE CROP :—								
Pull	0 19 10		0 18 8		1 8 11		1 2 6	
Cart and clamp (includes straw)	2 10 2		4 19 7		4 14 8		4 1 6	
		3 10 0		5 18 3		6 3 7		5 4 0
OVERHEAD AND GENERAL EXPENSES :—								
Repairs to drain	—		—		0 10 11		0 3 8	
Rent and rates	1 4 8		1 3 8		1 3 10		1 4 1	
Implements, depreciation and repairs	0 4 0		0 15 1		0 19 9		0 12 11	
		1 8 8		1 18 9		2 14 6		2 0 8
TOTAL . . . . £		19 2 6		19 15 7		21 15 5		20 4 6
Yield per acre	24·5 tons		18·3 tons		44 tons		29, tons	
Cost per ton	15*s.* 7*d.*		21*s.* 7*d.*		9*s.* 11*d.*		14*s.*	

DETAILS OF COST OF MAKING SILAGE, 1922, 1923 AND 1924.

PER ACRE.

	1922		1923		1924		Three Years' average	
	£ *s.* *d.*		£ *s.* *d.*		£ *s.* *d.*		£ *s.* *d.*	
CULTIVATIONS, ETC. :—								
Plough	1 3 4		1 0 3		0 17 7 (*Tractor*)		1 0 5	
Harrow	0 2 4 (*Twice*)		0 4 9 (3 *times*)		0 4 8 (3 *times*)		0 3 11	
Roll	—		0 1 4		0 2 1		0 1 1	
Seed	2 2 0		2 4 0		0 17 3		1 14 5	
Drill	0 1 9		0 2 0		0 1 11		0 1 11	
Dung (less residual value)	—		3 10 9		—		1 3 7	
Artificial manures (less residual value)	2 7 2		1 19 5		2 7 11		2 4 10	
Weeding	0 1 9		0 3 9		—		0 1 10	
		5 18 4		9 6 3		4 11 5		6 12 0
HANDLING THE CROP :—								
Cutting	0 5 0		0 12 0		0 17 2		0 11 5	
Carting and filling silo	1 12 8		3 16 0		3 8 8		2 19 1	
		1 17 8		4 8 0		4 5 10		3 10 6
OVERHEAD AND GENERAL EXPENSES :—								
Rent and rates	1 5 5		1 3 6		1 3 10		1 4 3	
Depreciation of implements and repairs	0 4 0		0 14 4		0 19 9		0 12 8	
Depreciation of silo, cutter and blower	2 6 7		2 10 8		3 11 3		2 16 2	
		3 16 0		4 8 6		5 14 10		4 13 1
TOTAL . . . . £		11 12 0		18 2 9		14 12 1		14 15 7
Yield per acre (estimated) of green material	8·3 tons		10 tons		9 tons		9 tons	
Yield per acre of silage fed	4·8 tons		7·3 tons		6·4 tons		6·2 tons	
Cost per ton of silage fed	£2 8*s.* 4*d.*		£2 9*s.* 8*d.*		£2 5*s.* 7*d.*		£2 7*d.* 10*d.*	

NOTES

A. BOTH CROPS.

1. *No charge* has been made for :—
   (*a*) Management.
   (*b*) Interest on Capital. This item is a charge against profits at the end of the year, except in so far as the silo, etc., are concerned (*see* Note on Silage Crops).
   (*c*) General Expenses. (Other than those named.)
2. *Implements.* The figures for depreciation and repairs are obtained from the valuation made by a certified valuer, whose system is to deduct 25 per cent. from all new implements and 5 per cent. from the old implements. This seems an unsatisfactory method, as depreciation will be very heavy in a year when several new implements are bought, with the result that the depreciation is not distributed uniformly year by year.

   Repairs to implements are included and the apportionment, depreciation and repairs, is made as follows: a nominal sum, say 3*d*. per acre, is debited to the pasture land on which only harrow and roll are used, and the remainder is then charged up at the same rate per acre on the meadow (hay) and arable land.
3. *Dung.* The cost of spreading is included.

B. MANGOLD CROPS.

Cleaning Costs. No allowance was made for the cost of "Cleaning Operations," a proportion of which should strictly be charged to the following crops in the rotation, and which is estimated at £1 6*s*. per acre; this would reduce the cost per ton to about 13*s*. 1*d*.

1922 *Crop.* One-third of the crop was carted to the farm buildings, the remainder being clamped in the field.

1923 *Crop.* All the crop was carted to the farm buildings. The cost of carting was very heavy as the field was a long distance from the buildings, where the mangolds were clamped.

1924 *Crop.* All the crop was carted to the farm buildings, the cost of carting per acre was heavy owing to the exceptionally large crop.

The cost per acre for subsoiling (9*s*. 7*d*.) was the proportion chargeable to the mangold crop, the remainder being spread over the other crops in the rotation.

C. SILAGE CROPS.

Depreciation and Interest on Capital. The charges for depreciation and interest on silo, cutter and blower are high; but the life of a wooden silo is a short one and, again, the initial capital outlay was heavy compared to present-day prices.

In comparing the cost of silage and mangolds, the interest on the capital outlay must be taken into account, as the silo, cutter and blower are used for silage only, and are not usually included in the equipment of the farm. It will be noted that no interest is charged to either crop for other capital involved.

		£	*s*.	*d*.
(*a*) Depreciation:				
Initial outlay	£380			
Estimated life	20 years			
Annual depreciation		19	0	0
(*b*) Interest:				
Outlay	£380			
Interest at 5 per cent. on £190		9	10	0
Total annual depreciation and interest		£28	10	0

It may be noted that Sir Daniel Hall, in a paper read at the Farmers' Club in 1922, estimated the annual depreciation and cost of repairs to be £22 10*s.*

With regard to the charge for interest, the capital value decreases as depreciation takes place and £19 must be written off each year. Thus, the charge for interest would be £19 for the first year, and 19*s.* for the twentieth year, so that the annual amount on which interest is charged is approximately half of £380, namely £190, and the average rate of interest at 5 per cent. £9 10*s.* per annum.

Cost of Seed. Tare seed was very expensive in 1922 and 1923, which makes the cost of seeding very high compared to that of 1924.

Cost of Cutting, Carting and Filling. In 1922 the field on which silage was grown was situated close to the silo and the crop was a light one, which accounts for the cost being much less than in 1923 and 1924.

Waste in Silo. There is a great difference in the weight of the green material carted into the silo, and the silage actually fed, the average loss for the three years being about 30 per cent. This percentage agrees with Sir John Russell's figures in the early silage experiments at Wye, and also with those on two farms in Essex.

Catch-crop after Silage Crop. If a catch-crop, such as late turnips, rape or mustard, is grown after the silage crop has been carted, the cost of silage would be slightly reduced, as a proportion of the rent and rates would be charged to the catch-crop.

1923 *Crop.* The high cost per acre compared with 1924 was due to the application of dung in addition to artificial manures. In 1925 dung was again applied as well as artificial manures, and the cost per acre was approximately £18. The crop yielded about 12 tons per acre of green material.

A STUDY OF THE SUGAR-BEET POSITION.

1. The History and Development of the Sugar-Beet Industry.
    (*a*) General.
    (*b*) In U.S.A.
2. Discussion of the Probable Expansion in England and Wales.
3. Some Factors affecting Future Development.
    (*a*) Costs and Factory Efficiency.
    (*b*) Labour Situation.
    (*c*) Food Supplies for Stock.
4. Summary and Conclusions.

1. THE HISTORY AND DEVELOPMENT OF THE SUGAR-BEET INDUSTRY.

(*a*) General.

The history of the sugar-beet crop, when compared with that of cane sugar, covers but a very few years. Whereas sugar was known even in this country at least as far back as the fourteenth century, although it was not until the eighteenth that it began to take its place as a general article of food, the beginning of the sugar-beet industry dates only from the year 1801, when the first beet-sugar factory was established in Silesia. The development of the industry since then has been irregular, and is mainly bound up with the history of the Napoleonic wars, and of the fiscal policies adopted by the various European countries. Briefly, the protectionist countries have been able to stimulate the production of sugar to an extent which may probably have been beyond the limit of its natural expansion, and, by means of bounties on export paid largely out of funds provided by excise duties, to restrict their home consumption and to supply the markets of other countries with sugar at low prices. Thus, by 1840, six years before England became a free-trade country, the world's beet-sugar trade, although definitely established, was only providing 4·35 per cent. of the world's total trade in sugar, whereas by 1880 it had increased this percentage to 46·13, the average price of sugar having fallen from 48*s.* a cwt. to 20*s.* 4*d.* in the same period. This development may or may not have been the cause of the severe depression which occurred about the same time in the cane industry in the British sugar-producing Colonies, but, at any rate, in 1887 the Foreign Office began to make attempts, abortive at first, to improve the Empire sugar position. These negotiations culminated in the Brussels Convention, ratified in 1903, by which the contracting countries undertook to suppress bounties which might benefit the production or export of sugar. The countries concerned were Germany, Austria-Hungary, Belgium, Spain, France, Great Britain, Italy, the Netherlands and Sweden. Russia joined the Convention in a modified form in 1907. The expectation so far as Great Britain was concerned was that British cane sugar would be able to compete again with foreign beet-sugar on fair terms, whilst the Continental countries hoped to put a stop to the expense of competing against each other by means of bounties. Great Britain remained a party to the Convention up to 1913.

Meanwhile the world's production of beet-sugar which in 1801 had stood at about 6 tons, an infinitesimal proportion of the world's total sugar supply, had attained not much more than a hundred years later an annual output of over 8,000,000 tons, representing 47 per cent. of the whole. The industry by the beginning of the present century had not only expanded at the phenomenal rate thus indicated, but it had become so firmly rooted that, except for the year 1911–12, when yields per acre in most countries were very low, development continued up to the outbreak of the Great War. The output of the more important countries which, on the average, represented 94 per cent. of the world's production of beet-sugar during the years immediately preceding 1914, is shown for that period in the accompanying table:—

TABLE I.

Production of Beet-Sugar in certain Countries.

1909–10 to 1913–14.

(Thousand tons.)

	1909–10.	1910–11.	1911–12.	1912–13.	1913–14.
Germany	2,007	2,551	1,475	2,666	2,675
Austria	924	1,155	708	1,289	1,151
Hungary	354	342	418	582	538
France	769	682	488	920	752
Belgium	244	278	240	292	224
Holland	178	197	237	282	206
Denmark	62	99	114	133	160
Spain	85	62	92	112	167
Italy	109	171	156	195	301
Sweden	124	172	125	130	135
Russia	1,171	1,986	1,938	1,381	1,688
Total	6,027	7,695	5,991	7,982	7,997
U.S.A.	520	518	609	703	745
Total	6,547	8,213	6,600	8,685	8,742

France and Belgium are the only two out of the twelve countries shown whose output in 1913–14 was not greater, and in most cases considerably greater, than in 1909–10, and in these two countries the decline was not considerable. Hence the total production in the European countries shows the significant increase of nearly 33 per cent. over the period. The individual countries have not expanded at a regular rate. Apart from Denmark, which presents the only case of continuous progress throughout these years, the fluctuations, especially in Germany, Austria, Russia and France, were often remarkable, resulting, for instance, in France on one occasion in a rise of 88 per cent. between one year and the next.

It must be remembered, however, that it is the question of sugar production that is here under consideration, and that a review of the acreages of beet sown would show a steady expansion in Hungary and Italy, as well as in Denmark, while the variations of acreage from year to year would be less marked in the case of all countries than were the fluctuations in output of sugar.

The industry as a whole, then, was undoubtedly one in which expansion was in full progress before the war. It is not easy, however, from these figures to gain any clear impression of the size of the industry as viewed from the agricultural point of view, and for this reason the seven European sugar-producing countries with whom this country is more immediately interested are further examined, particularly as regards acreages, in Table II. It has not been possible to obtain the required information for each country to cover the same year, but it is only in the case of Austria that the year selected is not typical. It so happened that in 1911, the year for which figures for that country are shown, the production was exceptionally low. This, however, was mainly due to a poor yield of beets rather than to a reduced acreage grown, the latter being only 2 per cent. lower than in the previous year, and 5½ per cent. below that of the year following.

TABLE II.

Acreage under Sugar-Beet and Production of Raw Beet-Sugar in seven European Countries.

(In order of importance as producers of Beet-Sugar about the year 1911.)

Country.	Date.	Sugar-Beet in Thousand Acres.	Per Cent. of Arable Land.	Production of Raw Beet-Sugar in Thousand Tons.
Germany . . .	1913	1,316	2·1	2,675
Austria	1911	615	2·3	708
France	1910	611	1·0	682
Hungary . . .	1910	291	0·8	342
Belgium	1910	149	4·5	278
Holland	1911	137	6·2	237
Denmark . . .	1912	80	1·3	133

And in order to take stock of the position from the farmer's standpoint, it is the acreage figure that is of more importance than is the quantity of sugar produced. It is seen that in the countries under review the acreage sown to beet before the war varied from 0·8 per cent. of the total arable in the case of Hungary to 6·2 per cent. of the arable land in the case of Holland, the largest acreage being recorded in Germany (1,316,000 acres) and the smallest in Denmark (80,000 acres). The marked variations in the percentages of arable land under beet here shown are to be accounted for to some extent by distribution. In the case of Holland and Belgium the crop is extensively grown in most parts of the country, and the high percentage figures of 6·2 and 4·5 respectively appear ; in France, on the other hand, the crop is almost entirely confined to one district, so that, although taken over the country as a whole, the proportion is only 1 per cent., the proportion in the beet-growing departments amounted in point of fact to 7·3 per cent.

The position since 1914 has been modified by the intervention of the war, but for the meantime it is sufficient to say that the pre-war situation may be taken as the normal, and that there would seem to be little reason why conditions should not tend to revert to that level.

The facts which have been presented will suffice to show that a discussion of the sugar-beet question must necessarily relate to a crop, which, although it occupies a comparatively restricted area, has in a very short space of time established itself as one of the premier sources of the World's sugar.

(*b*) In U.S.A.

In addition to this outline of the general development of the industry there are many valuable lessons to be derived from a more detailed study of its expansion in each individual country. Considerations of space prevent such a study covering all countries in the present case, and it has been thought advisable, therefore, to select one country for rather special attention. The U.S.A., rather than any of the European countries, has been chosen for this purpose for various reasons. The beet industry on the Continent is largely bound up with the system of peasant proprietorship, a fact which often makes comparison with this country difficult from the economic point of view, whereas American methods, although conducted under somewhat different climatic conditions, are less intensive, and in many respects are more like those of this country. Then again, the development of the industry in the U.S.A. has taken place in more recent years than in the European countries, for, although attempts had been made in the first half of the nineteenth century to establish the industry on a remunerative basis, it was not until 1879, when a factory erected in California was able to operate at a profit, that the growth of the industry on any appreciable scale began ; and its establishment as a commercial success did not actually take place until the last decade of the nineteenth century. Moreover, the sugar industry in the States has been built up, firstly, on a system of bounties and, later, behind a tariff barrier which introduces a further point of similarity with this country, where the industry is progressing under the stimulus of a subsidy. Although the amount of the tariff on imported sugar has varied with different administrations legislation has been favourable, on the whole, to the beet-sugar industry and its present magnitude has undoubtedly been reached by the stimulation afforded by these import duties.

Evidence of the remarkable development and the present scale of the sugar-beet industry in the United States is afforded in the following table :—

TABLE III.

Development of the Beet-Sugar Industry in the U.S.A.

Period.	Average Beet-Sugar Production (chiefly Refined).	Total [1] Sugar Production in U.S.A. and Possessions.	Total Consumption of Sugar in U.S.A.	Percentage Beet-Sugar Production to Total Production, U.S.A. and Possessions.	Percentage Beet-Sugar Production to Total Consumption, U.S.A
	1,000 Tons per annum.	1,000 Tons per annum.	1,000 Tons per annum.	Per cent.	Per cent.
1881–1890 .	1	464	1,310	0·2	—
1891–1900 .	35	728	2,039	4·7	1·7
1901–1910 .	321	1,355	2,912	23·7	11·0
1911–1920 .	695	2,191	3,921	31·7	17·7
1921–1923 .	767	2,369	5,012	32·3	15·3

[1] Continental U.S.A., Porto Rico, Hawaii and the Philippine Islands. Porto Rico 1900–1906 shipments to U.S.A. Philippine Islands exports to 1911 production 1912 and subsequently.

From an average annual production of a little over 1,000 tons in the decade 1881–1890, the amount of beet-sugar produced has increased to 767,000 tons during the three post-war years 1921–1923, and production has increased by leaps and bounds without interruption from decade to decade. The percentage production of beet-sugar as compared with the total production of the United States and its possessions increased rapidly from 0·2 per cent. in the period 1881–1890 to 31·7 per cent. in 1911–20, and in the post-war years 1921–1923 the proportion has increased to 32·3 per cent. It has therefore established itself in the face of cane-sugar produced in Louisiana and other cane-producing areas in the Southern States, and also in competition with cane produced in the insular possessions of the United States, viz., Porto Rico, Hawaii, and the Philippines, from which possessions imports of sugar have been admitted duty free from various dates. Sugar from Hawaii was placed on the free list as from 1876, and that from Porto Rico and the Philippines has been admitted free of duty as from 1901 and 1913 respectively. From 1902 to 1913 sugar from the Philippines paid 75 per cent. of the then existing foreign duties on imported sugar.

Although the proportion of beet-sugar to the total consumption of the United States is not high, the share from this source has also shown a steady increase up to the decade 1911–1920, when it was nearly 18 per cent. of the total sugar consumed. In the three years 1921–1923 the proportion fell to 15·3 per cent., which is partly accounted for by the agricultural dislocation caused by the slump in prices in 1920–1921. Beet-sugar produced fell from 911,150 tons in 1921 to 602,678 tons in 1922, but since then the amount has been increasing, being 786,607 tons in 1923, and 968,750 tons in 1924.

The growing of sugar-beet in the United States is confined to the Northern and Western States. It is embraced roughly in the area of a triangle with the Pacific seaboard for its base, the Canadian frontier as its Northern side and an irregular line from California on the West to the extreme North-Eastern frontier for its Southern side. The distribution of the sugar-beet crop within this belt is characterised by mean summer temperatures of from 67° F. to 72° F.

Soil has been an important factor in determining the extent of development. In the North-Eastern area the crop is grown on medium loams to heavy clays, dark in colour, with calcarcous subsoils at depths of 2 to 3 feet, but " it has been found that the best average results . . . are secured on the dark coloured silt and clay loams, and it is probable that these soils carry over 75 per cent. of the crop."[1] The crop is also grown on lighter and sandy soils where yields are found to be more variable though the sugar content is usually higher. This accords with the general experience in this country. In the West a much greater variety of soils is used for sugar-beet, but sandy loams, fine sandy loams and silt loams carry the greatest acreage.

Irrigation is practised in nearly all the important sugar-beet growing areas of the United States. Michigan, in the North, is the only important sugar-beet State which relies entirely on rainfall for the moisture requirements of the crop.

These factors of temperature, suitability of soils and the necessity for a supply of irrigation water, have had the effect of restricting the development to that part of the country previously described, and even within this belt the growth of the crop is highly localised. This is a case of necessity in the production of sugar-beet, because factories cannot be erected until an adequate supply of beets is assured, and outlying areas which might grow it cannot do so in the long run because of the prohibitive transit charges. Sugar-beet is one of the most intensive crops grown by American farmers and this has made it difficult to establish on a really large scale. Beets have failed to establish themselves in the corn (maize) belt of the States, firstly on account of the low labour requirements of corn and secondly because beets require attention at the same time, and the established crop is so suitable for the belt that it is not easily displaced by a competing crop. Nor has the crop made much headway in the great wheat sections of the country, where farmers have found it more profitable to handle a large acreage of wheat with machinery rather than to grow a small acreage of beets which make a heavy demand on manual labour. Some idea of the comparative labour requirements of the crop in the States is obtained from the following remarks of Harris:—

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[1] For this and following quotations see list of authorities, p. 89.

"More than ten times as much hand labour is required to raise an acre of beets as to raise an acre of wheat, over five times as much as to raise an acre of corn and more than twice as much as to raise an acre of potatoes. The horse labour required for beets is over three times that for wheat, oats and barley, and about one and one-half times as much as for potatoes."

The relationship of beet acreage to the total land under crops and its value to all crops produced is shown below for the principal beet-growing States and for the United States as a whole:—

TABLE IV.

Land in Crops and Acres in Sugar-Beets, U.S.A., 1919, *according to Brandes and others.*

State.	Land in Crops.	Area in Sugar-Beets (harvested).	Sugar-Beet Acreage as Percentage of	
	1,000 Acres.	1,000 Acres.	Land in Crops. Per cent.	Value of all Crops. Per cent
California . .	6,851	88	1·29	1·47
Colorado . .	5,417	166	3·06	9·61
Idaho . . .	2,798	37	1·33	2·16
Michigan . .	10,001	106	1·06	2·92
Nebraska . .	19,432	54	0·28	1·12
Ohio	13,934	34	0·24	0·63
Utah . . .	1,071	93	8·72	17·31
Wisconsin . .	10,266	13	0·12	0·33
	69,770	591	0·84	—
Other States .	305,662	45	0·01	—
U.S.A. . . .	375,432	636 [1]	0·17	0·45

[1] According to U.S.D.A. Yearbook statistical tables the acreage harvested in this year was 692,000 acres.

The figures are for the year 1919 and though the area grown is 636,000 acres the crop only forms a very small proportion of the land under crops. The highest percentage of sugar-beet to crop land was in the Mormon State of Utah, where it reached 8·72 per cent. The next highest percentage was in Colorado, where it reached 3·06 per cent. of the land under crop. In the eight principal beet-growing States 591,000 acres, or 92·9 per cent. of the total output of the U.S.A., is grown. This acreage only amounts to 0·84 per cent. of the total crop land. It would appear therefore that even under a system of protection the agricultural aspect of the industry does not reach gigantic proportions, the retarding factors being the competition of the other crops and the labour situation generally, which in a developing country like America is of paramount importance. It will be noticed, however, from the last column in the preceding table that sugar-beets generally give a relatively high return as compared with the acreage grown.

The number of farms reporting sugar-beet in 1919 was 47,211 or 0·7 per cent. of the total number for the U.S.A. The percentage of sugar-beet farms to all farms in the chief beet-growing States is shown in the following table, together with the average acreage grown on each farm :—

TABLE V.

Percentage of Farms growing and Area of Beet per Farm in principal Beet Growing Districts : U.S.A.

State.	Farms growing Beet. Percentage of all Farms.	Area per Farm reporting.
	Per cent.	Acres.
California	1·3	59·3
Colorado	12·7	21·8
Idaho	6·6	13·5
Michigan	7·5	7·2
Nebraska	1·2	35·6
Ohio	1·4	9·1
Utah	32·7	11·1
Wisconsin	1·8	3·6
All other States	0·3	12·9
U.S.A.	0·7	13·5

The proportion of farms growing sugar-beet to total farms reaches its highest in Utah, where nearly one in every three farms grew the crop. In Colorado one farm in eight grew beets, and smaller proportions are found in the other States.

It will be seen that the average number of acres handled on the sugar-beet growing farms in some of these States was quite large. In California, an average of 59·3 acres per farm was grown, in Nebraska 35·6, in Colorado 21·8 acres, and of the farms reporting for the whole of the United States the average is 13·5 acres. It should be remembered in considering these figures that American farmers are not growers of turnips, swedes and mangolds. For the whole of the United States in 1919 an acreage of only 88,000 acres of root crops was grown altogether, but potatoes are an important crop in several of the sugar-beet growing States, especially in Michigan and Wisconsin. There, owing to the rapid growth of population due to industrial development, potatoes are tending to displace sugar-beet for the reason that of these two crops it is sugar-beet which can better be located at a distance from consuming centres. The explanation lies in the fact that sugar, being the more valuable commodity, weight for weight, will leave a better margin of profit after being transported considerable distances.

Sugar-beet is evidently a crop favoured by smallholders. As a result of a survey carried out in Utah it was found that beets occupied a larger percentage of the farm land as the size of the farm decreased.

2. DISCUSSION OF THE PROBABLE EXPANSION IN ENGLAND AND WALES.

The foregoing review of the development of the sugar-beet industry, first, in the world as a whole, and second, in the United States in particular, leads naturally to the question of the development in England and Wales.

Some discussion of this matter appears in a monograph by the present writers which was published in January, 1926, where it is shown that, although spasmodic attempts had been made during the nineteenth century to establish the industry in England, the present serious effort to that end dates practically from 1912, when the Cantley factory was opened. That event was marked by an increase of acreage sown to beet of from just over 500 to almost 4,000 acres. The development since that year has been very erratic, especially in the four years 1916 to 1919, when the factory was closed, and the acreage fell away again to anything between 150 and 170 acres. In 1920, however, Cantley was reopened and the following year the factory at Kelham began to operate. The acreage responded, and the subsequent development may be indicated by the following table :—

TABLE VI.

Development of the Sugar-Beet Acreage in England and Wales since 1920.

Year.	Acres of Beet.	Remarks.
1920	3,017	Cantley factory reopened.
1921	8,333	Kelham factory opened.
1922	8,409	Kelham factory closed.
1923	16,918	Kelham factory reopened.
1924	22,441	First year of Government subsidy. Colwick factory opened.
1925	54,750	Eight factories in operation.

The average yield per acre of washed and topped roots in 1923 and 1924 was 7·23 tons, with an output of 13,300 tons of sugar in 1923 and 23,700 tons in 1924. On the same reckoning the output of sugar in 1925 would be about 51,000 tons. The total consumption of sugar (apart from molasses, and sugar in the form of confectionery, preserves and so on) in the United Kingdom in 1924 was 1,541,123 tons, an increase of 5·8 per cent. over that of the previous year, but assuming the consumption in 1925 to be at the same rate as in 1924, the home-grown sugar last year would have accounted for only 3·3 per cent. of the total home consumption. At the rate of production and consumption indicated it would require no less than 1,639,667 acres to be devoted to the growing of sugar-beet were the whole quantity of sugar normally consumed to be grown within the borders of the United Kingdom, and of this amount it may be reasonably expected that from 1,200,000 to 1,300,000 acres would have to be grown in England and Wales. The latter acreage represents, on the average, 4·8 per cent. of the total area under all crops and grass in the country, excluding rough grazing, 11·7 per cent. of the arable land, and no less than 54·1 per cent. of the area devoted to root crops and bare fallow last year, while it would be equivalent to 75 per cent. of the total area at present under mangolds, turnips, swedes and potatoes, being three and one-half times as great as the mangold acreage.

Such an expansion is probably beyond the limits of likely development, to gain an indication of which an examination of the acreage statistics of some other beet-growing districts and countries may not be out of place. Table VII is designed to show the extent of development to which the growing of sugar-beet has actually attained in Germany, Holland, Denmark, Belgium and U.S.A. In that the beet crops in France are very largely confined to certain departments, the figures for those departments are given, as well as the figures for the whole country; and owing to the fact that European conditions have been greatly modified by the war, the pre-war figures have been included as giving a better picture in some cases of the position of the crop.

TABLE VII.

The Relative Importance of Sugar-Beet in various Countries.

Country and Date	The Sugar-Beet Acreage expressed as a Percentage of				
	Total Area	Arable Land	Roots and Fallow	Mangolds, Turnips and Swedes, and Sugar-Beet	Mangolds
Germany, 1913	1·0	2·1	—	—	—
Holland, 1911	1·9	6·2	—	—	—
Denmark, 1912	0·8	1·3	—	—	—
Belgium, 1913	2·0	4·4	—	—	—
France, 1913	0·5	1·1	3·5	21·5	34·4
Main beet-growing district of France, 1913	4·9	7·3	—	61·4	168·0
Germany, 1924	0·8	1·9	8·2	35·0	53·8
Holland, 1924	2·5	8·0	25·1	56·5	205·6
Denmark, 1924	0·9	1·5	7·3	20·2	44·9
Belgium, 1924	2·7	6·6	25·2	50·0	108·0
France, 1924	0·3	0·8	2·7	17·4	26·6
U.S.A., 1924	0·04	0·2	17·9	—	—
Main beet-growing district of France, 1921	2·0	3·2	—	40·6	79·3

Of the various percentages shown it is proposed to use those which relate to the total arable land for purposes of discussion, though there is no reason why some of the other comparisons might not be equally instructive. The largest inroad made by the beet crop into the arable acreage of any of the countries shown is in Holland, where 8·0 per cent. of the ploughland was devoted to it in 1924. The corresponding figure for Belgium was 6·6 per cent., both these countries showing considerable increases over the pre-war figure. This is to be expected, since the falling off of sugar supplies caused by the war provided no small stimulus to increased production on the part of those countries in a position to respond to it. Both these countries were able to take advantage of this fact, as the one had been neutral, and the devastated region in the other was practically confined to Western Flanders. It is significant that in both Holland and Belgium the beet acreage forms a quarter of the area devoted to roots and fallow, and half, or more than half in the case of Holland, of that sown to mangolds, turnips, swedes and beet when taken together. In Holland there is more than twice as much land under beet as there is under mangolds, whilst in Belgium the two crops are of about equal importance. In that part of France where beet is most extensively grown the proportion of arable land sown to that crop in 1913 was 7·3 per cent., but owing to extension of the devastated region into this district, the corresponding figure for 1924 was only 3·2 per cent. In this district of France before the war, and in Belgium and Holland since the war, the crop has established itself in a position of far greater importance than in any of the other countries shown, and it is not to be anticipated that England, with large areas admittedly unsuitable for the crop and with a far less intensive system of farming, would be able to expand its beet acreage to a similar extent. It will be interesting, however, to take these figures as showing a maximum possible development in England and Wales.

With a proportion of beet to ploughland in Holland and Belgium in 1924 of 8·0 per cent. and 6·6 per cent. respectively, and in the beet-growing districts of France in 1913 of 7·3 per cent., it may be taken that the corresponding figure for England and Wales might be the average of them, say, 7·3 per cent. This, for the present arable acreage, would represent 779,640 acres of beet, and (assuming a yield per acre of 7·23 tons and an extraction of 13 per cent.) 732,783 tons of sugar. This would amount to rather more than 40 per cent. of the total quantity imported into the United Kingdom in an average pre-war year.

To revert to a less speculative proposition, it may be fairly supposed that from the agricultural point of view, and assuming suitable conditions of prices, this country might well develop the new industry up to the point reached by France as a whole, or even by Germany, before the war. Unfortunately the United States, where the crop is by no means universally distributed over the vast acreage of that country, cannot be usefully considered in this respect. A glance at Table VII shows that the proportion of beet to ploughland in France was 1·1 per cent. and in Germany 2·1 per cent. It is difficult to say to which of these two countries this country is most likely to approximate. In Germany the crop is well distributed, whereas in France it is localised. There is evidence that beet can be very successfully grown in many parts of this country which as yet have hardly been touched for the purpose, a fact which would favour a comparison with Germany, and, moreover, there are large tracts of arable land in the South of France which can be more profitably cultivated with crops which will not grow in the North than with beet, a fact which might unduly depress the percentage of beet sown in that country. On the other hand, there are undoubtedly large areas of arable land in England and Wales where beet will probably never make much headway, the cold clays, for example, and the blowing sands.

Adopting this method of forecast, however, the probable figure for this country may be assumed to fall somewhere between the German and the French percentage, and this would involve an acreage of beet in England and Wales amounting to anything between 117,480 and 224,280 acres, or an average of 170,880 acres, about 22 per cent. of the previous estimate.

There is yet a third method of comparison, suggested by a calculation previously made by the present writers, and of the three it may be found to be the most reliable. The average of the pre-war percentages in Holland and Belgium, i.e. 5·35 per cent., may be applied to those counties of England whose arable acreage is more than 60 per cent. of their total area, and an arbitrary percentage of, say, 0·5 per cent. applied to the rest of the country.

The arable land in the selected beet-growing counties [1] amounts to 3,942,608 acres, and in the rest of England to 6,739,445 acres. 5·35 per cent. of the former figure added to 0·5 per cent. of the latter gives a total sugar-beet acreage on this basis of 244,626 acres. This acreage is shown in the following table as a percentage of various other acreages in the country, and provides a basis of comparison with the figures in Table VII.

TABLE VIII.

Acreage of Sugar-Beet.

Expressed as Percentage of :—

	Total Area	Arable Land	Roots and Fallow	Mangolds, Turnips and Swedes, Sugar-Beet	Mangolds
England and Wales assumed Sugar Beet acreage, 244,626 acres	0·9	2·2	10·4 [2]	20·1	68·1

Assuming that beet would be grown mainly instead of roots,[3] it is seen that 10·4 per cent. of the present root and bare fallow acreage would have to be given up in favour of beet, which would then occupy an area representing 20·1 per cent. of the present acreage under mangolds, turnips, swedes and beet when taken together, and a good deal more than half as much land as is at present devoted to mangolds. It would involve the growing of nearly four and a half times the acreage under beet in 1925, and it would enable the United Kingdom to dispense with about 13 per cent. of its present imports of sugar for consumption, though this figure might be increased by means of higher yields and better sugar contents on the part of the farmers, and higher sugar extraction on the part of factories, without increasing the acreage of beet sown.

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[1] E.g. Huntingdon, Cambridge, Isle of Ely, Hertfordshire, Essex, Suffolk, Norfolk, Lincolnshire, Soke of Peterborough and the East Riding of Yorkshire.

[2] Including such replaceable market-garden crops as celery, carrots, onions, etc.

[3] The question of crops superseded by beet is more fully discussed in *Sugar Beet.* See notes, p. 89.

The foregoing arguments are shown in tabular form below, together with the estimated development assuming that the crop will expand throughout the country to the extent to which it has already developed on twenty-six of the beet-growing farms whose figures are dealt with in the monograph already referred to. On these farms the percentage is 3·86, and this figure has been applied here to the whole of England and Wales, though it is more likely perhaps that it would represent the development in the more favourable districts only.

TABLE IX.

Summary of Estimates of Sugar-Beet Development in England and Wales.

	Sugar-Beet	Per cent of Arable Land Area
	Acres	Per cen
Acreage required to supply total sugar consumed	1,250,000	11·7
Acreage on basis of maximum development in Holland, Belgium and part of France . . .	779,640	7·3
Acreage on basis of Germany and whole of France	170,880	1·6
Acreage on basis of Holland and Belgium (pre-war) for part of England and 0·5 per cent. for remainder	244,626	2·2
Acreage on basis of expansion already recorded on twenty-six farms	412,327	3·86

Of the five estimates shown the third and the fourth would appear to be the most reasonable, in which case a beet acreage of about 200,000 acres in the future is not improbable. This would involve the payment of a subsidy ranging approximately from £3½ million on the present basis of 19*s.* 6*d.* per cwt. of sugar produced down to £1¼ million on the final basis of 6*s.* 6*d.* per cwt. There might also be a loss of revenue to the Exchequer through the existing remission of the excise duty, but this would depend on whether the home-produced sugar displaced foreign as opposed to Empire sugar imports, since the latter enjoy the same rates of preference as home-grown sugar.

3. SOME FACTORS AFFECTING FUTURE DEVELOPMENT.

(*a*) Costs and Factory Efficiency.

The expansion of the area devoted to the growing of sugar-beet in this country to the extent previously indicated is contingent on many factors. In the long run it depends, apart from any question of subsidies, on whether farmers can grow beets cheaply enough and the companies manufacture sugar efficiently enough to result in a price sufficiently low to enable them to compete on favourable terms in the open market. No one can attempt to forecast, with any reasonable certainty, the world prices of sugar in 1933 when the present subsidy ends, and at the moment a discussion of probabilities in this respect would serve no useful purpose. Less risk of error, however, is involved in an attempt to review the possibilities of reducing farmers' costs, of eliminating excessive transport distances and of increasing factory efficiency.

A review of the first question is bound up with that of yield and efficiency in methods. So far as yield is concerned it is true to say that the average for the country, as a whole, is very low. The washed yield was 6·56 tons per acre in 1922, 6·17 tons in 1923 and 8·04 tons in 1924, with an average of 7·12 tons over the three years. According to an American investigation carried out in 1919 the cost per ton decreased consistently as the yield increased from 9 to 24 tons per acre, and on this ground it can with fair certainty be held that the yields given above for this country are obtained at somewhere about maximum cost to the growers. This can readily be understood when it is remembered that some of the operations on the crops, and some of the standing charges such as rent and rates, and some overhead charges have to be met whether a large or small yield is obtained. It is true, of course, that to get the increased yield more expenses may be involved by way of fertilisers, and by more hand and horse hoeings, though this side can be overdone, but it is equally certain at the moment that there is considerable scope for improvement in yields without much increase in cost. The extremes of cost possible with low and high yields may be demonstrated by the figures of cost on certain farms in 1924.

TABLE X.

Showing costs per ton according to yield.

	Low Yield	Farm Cost per Ton	High Yield	Farm Cost per Ton
	Tons	s. d.	Tons	s. d.
Light Soils				
(1) [1]	3·71	74 3	11·94	32 3
(2) [2]	7·05	38 7	14·77	20 8
Medium and Heavy Soils:				
(1) [1]	5·94	68 5	11·33	49 7
(2) [2]	4·43	62 10	14·93	26 0½
Fen Soils:				
(2) [2]	7·36	37 11	15·25	30 5

[1] Using farmyard manure. [2] Not using farmyard manure.

The figures of farm cost per ton are extremely variable as between different groups of soil, and between the individual costs in the low and in the high-yield groups, but the general tendency to considerable reduction in cost from low to high yield is unquestionable.

Therefore, by obtaining better stands, by eliminating partial and total failures, and by better singling and hoeing methods, the effect of which should be to increase yields, the costs per ton should be considerably reduced.

It appears also that once this increased yield is obtained in the ground there is considerable scope for reducing labour costs per ton at harvesting and in the subsequent handling of the crop. A short account of American practices in dealing with the crop at this stage is therefore of interest and will be briefly outlined.

Two kinds of beet-lifting plough are in general use. The first is similar to the plough used in this country having a single point which is pulled along the beet row to loosen the beets from the soil and at the same time to raise them slightly. A lifter having two parallel points moving on each side of the row, which also loosens the beets from the soil and raises them slightly, is more commonly used. This machine is also somewhat like others in use in this country but unlike them in that the operator rides. It is called the "two blade riding beet-lifter."

After ploughing out the beets they are knocked and thrown either into piles or windrows, 12 to 20 rows of beets forming either. From these the beets are topped, and the topped beets thrown into central piles for loading. Sometimes they are put into windrows with all the crowns in one direction and this is considered to facilitate topping. In this case beets are topped on the ground and then thrown into piles for loading.

Mechanical diggers and toppers have not been much used, but there are two types on the market which appear to have some measure of success. The following general description from Harris will give an idea of these harvesters and what they accomplish :—

"There are two general types of harvesters : one that tops the beets and leaves the root in the ground to be lifted with another implement ; after the tops have been raked into windrows, the ordinary lifter is used. An attachment that is fitted to the lifter has been devised and its use facilitates the lifting process. This attachment also removes most of the dirt that would otherwise attach to the root.

The other type of harvester first lifts the beet and then tops it. This type of machine is fitted with equipment that delivers the roots in piles at one side, or with an extension of the delivery carrier, the roots are elevated directly into a wagon that is driven alongside the harvester. The tops are delivered, separate from the roots, and left in windrows or piles.

This latter type of machine moves under its own power, using a light-weight, high-speed gasoline engine. The first type described is drawn by a team and requires about the same power to propel it as does a mowing-machine that is cutting alfalfa."

Loading into wagons, however, is usually accomplished either by hand or with beet forks. To obviate the necessity of unloading by hand, ramps are provided at many station points. Loads are drawn up on these ramps and by means of special wagons, the body of which turns on an axis, the beets are dumped out over shoot boards into railway trucks.

Another feature which ought to be applied to this country is the provision of nets. Nets are laid over wagons before loading, the beets are then thrown in, and at the station the whole load is lifted *en masse* in the net into the railway wagon by means of a derrick.

At some receiving stations another device is provided which has the effect of reducing rail carriage. Harris says after weighing the load of beets a farmer "dumps his load into a hopper. From there the beets go into a revolving screen where most of the dirt is shaken off. It drops on a belt and is carried to a dirt hopper under which the farmer drives and gets his dirt back." In this country where the average tare may range from 11 to 19 lb. per cwt., even after going to considerable labour expense in knocking them on the farm, the advantage of clean beets, especially over long hauls, is obvious.

The provision of these facilities at factories and loading stations would cost money and would have to be paid for by the farmers, but with an established industry and maximum use the cost should not be large and would be considerably less than that involved in present practices.

Up to the present many growers have been handicapped by the long distances over which their beets have had to be sent by rail. Hauls of 80 miles have not been uncommon and the railway companies' charge for carriage was an exceptionally large proportion of the farmer's cost. For this distance rail carriage cost 8*s*. 4*d*. per ton of unwashed roots, or, assuming a tare of 16 per cent., 9*s*. 11*d*. per washed ton. Owing to the undeveloped state of the industry at the moment some of the factories, in order to stimulate the growing of the crop in outlying districts, are accepting deliveries of beets involving in many cases longer hauls than 80 miles. It is hardly conceivable in the long run, without the aid of a subsidy, that they will be able to give concessions of this extent and the growing of beets will have to be confined to a narrower radius from the operating factories. In the future it is unlikely that the average haul will be much more than 15 to 20 miles. On the basis of a 20 miles haul costs per ton of washed roots at present rates would be as under :—

Tare Per cent.	Rail Charge *s*.	*d*.
20	4	10¾
16	4	8
10	4	4
5	4	1½

Assuming, therefore, that the tare can be reduced to an average of 10 per cent., a cost of 4*s*. 4*d*. per washed ton may be regarded as a fairly normal cost in the future.

Disregarding the possibility of reduced costs by reason of improved harvesting methods, the position in regard to future farm costs and prices may be viewed in the light of recent costs on some farms where the yields were better than the average for England and Wales as a whole.

At the moment the *gross* costs of growing the crop are being given prominence and little attention is being paid to the credit items, such as manurial residues, the cleaning value of the crop, and the value of the by-products, viz. the crowns and leaves. It would, however, seem reasonable to assume in the absence of subsidies, that the factories cannot pay anything like present prices for their raw material, and the value of these items will have to be carefully ascertained in judging the economics of the crop and the possible prices the factories can be asked to pay. The ascertained gross costs on three types of soil are given below, and from them certain deductions have been made. Transport costs are based on those given above. Manurial residues as ascertained are deducted, a figure of 2*s.* per ton of washed roots is allowed for the cleaning value of cultivations, and a sum of 4*s.* per ton of washed roots as the value of the crowns and leaves is also taken off. To the net figure so obtained a sum of 5*s.* per washed ton has been added as the farmer's interest on capital and profit :—

TABLE XI.

Estimated cost per ton of washed Beets under varying Conditions of Yield.

	Light Soils	Medium and Heavy Soils	Fen Soils
Yield, tons	9·06	9·11	12·82
Sugar Content, per cent.	17·5	17·5	16·6
	s. d.	*s. d.*	*s. d.*
Farm Costs	39 11	40 7	36 2
Transport	4 4	4 4	4 4
Gross Costs	44 3	44 11	40 6
Deduct :			
Manurial Residues	3 10	2 11	2 1
Cleaning Residues	2 0	2 0	2 0
Tops	4 0	4 0	4 0
	9 10	8 11	8 1
Net Cost	34 5	36 0	32 5
Add Farmers' Profit	5 0	5 0	5 0
Cost to Factory	39 5	41 0	37 5

Until more information is available on the value of cleaning cultivations and the tops the cost figure can only be regarded as a rough approximation, and it is variable, of course, within a wide range depending on the conditions under which the crop is grown and the probabilities of increased yields in the future.

Using these estimations, however, it will be seen that, under a condition of high yield (12·82 tons), the cost to the factories is calculated to be 37*s*. 5*d*. per ton of washed roots and under a condition of more normal yields of 9 tons the cost may have to be as high as 41*s*. per ton.[1]

In the event of the payment of a bonus for sugar in excess of 15·5 per cent., the profit to the farmer would be increased to the extent of such bonus. It is hardly likely, however, that a bonus could be paid in addition to the profit shown in the table, and since, as the result of the experience of other countries, it would not be sound business on the part of the factories to omit some form of reward for high quality beets, it is probable that there would have to be some reduction in the estimated profit figure to allow for the bonus being paid. The justifications for the bonus are that with high sugar content more sugar can be obtained from each acre sown to beets and that there is also a reduction in operating costs at the factory. Harris, writing in 1918, states that in the U.S.A., " the price paid by manufacturers for beets constitutes over two-thirds of the total cost of manufacturing beet sugar ; *and the cost is relatively less for good beets than for poor ones.*"

Provided then that manufacturing efficiency is as great with beets of high quality as with beets of medium sugar content it can be demonstrated, using the present bonus scale, that the cost of beets per lb. of sugar extracted is somewhat less with high quality beets and, therefore, that the present bonus does not operate unfavourably to the companies. The figures are shown in Table XII, and are based on the estimated costs given previously in Table XI.

TABLE XII.

Estimated cost per lb. of Sugar with Beets of varying Sugar Content.

	Sugar Content	Loss	Extraction	Price per ton of Beets		Cost per lb. of Sugar
	Per cent.	Per cent.	Per cent.	*s.*	*d.*	*d.*
Light Soils	15·5	3·0	12·5	39	5	1·69
	17·5	3·0	14·5	44	5	1·64
Medium and Heavy Soils	15·5	3·0	12·5	41	0	1·75
	17·5	3·0	14·5	46	0	1·70
Fen Soils	15·5	3·0	12·5	37	5	1·60
	16·6	3·0	13·6	40	2	1·58
	17·5	3·0	14·5	42	5	1·56

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[1] It is interesting to note that the average price per ton paid to growers in the U.S.A. for the 1923 crop, averaging 8·92 tons per acre, sugar content 15·34 per cent., was $10·07 or 41*s*. 4*d*. at par of exchange.

Incidentally the figures in the above table illustrate, given the assumptions made, the possible range of the cost of the raw material entering into each lb. of sugar produced.

The question of factory efficiency in the extraction of sugar is important and presents for examination many features which are bound up with the organisation of the business, the machinery employed, the technique of the chemists and the skill of the other employees of the companies. Such matters cannot be discussed until more definite information is available on the manufacturing side of the business. In the matter of extraction, however, such figures as are at hand suggest that the factories, up to 1924, had not been able to limit the loss of sugar to 3·00 per cent. by weight of beets worked.

This loss is smaller than that of the Cantley and Kelham factories in the past. Taking the average extraction obtained by the Cantley factory in 9 years up to 1924 with beets of average sugar content of 16·42 per cent., the recovery of sugar has only been 12·31 per cent., or a loss of 4·11 per cent. At Kelham for 3 years the loss was 4·47 per cent. on beets of 16·53 per cent. sugar content. Only in one year, viz. 1923, was the loss lower than 3 per cent. In that year the Cantley factory extracted 13·18 per cent. from beets of 15·75 per cent. sugar content, a loss of only 2·57 per cent.

The extraction at both these factories has been appreciably increased in the last three working years, as the following figures show :—

TABLE XIII.

Recovery of Sugar at Cantley and Kelham.

	Sugar Content Per cent.	Extraction Per cent.	Loss Per cent.
Cantley, 1922	16·64	13·23	3·41
1923	15·75	13·18	2·57
1924	16·74	13·25	3·49
Kelham, 1921	15·90	8·82	7·08
1922	16·24	12·31	3·81
1924	14·74	13·35	3·39

In this connection American figures make interesting comparisons. Figures of sugar content, extraction and loss, for the years 1914–20 and 1921–24 in the whole country and in California, where higher sugar contents are obtained, for 1920–24 are given below :—

TABLE XIV.

Recovery of Sugar in U.S.A.

	Analysis of Beet		Recovery of Sucrose		Loss Percentage
	Percentage of Sucrose	Purity Coefficient Percentage	Percentage of Weight of Beets	Percentage of Total Sucrose in Beets	
U.S.A. Average: 1914–1920	16·01	84·07	13·57	84·75	2·44
1921	15·77	83·09	13·76	87·25	2·01
1922	15·44	83·76	13·61	88·15	1·83
1923	15·34	83·43	13·41	87·42	1·93
1924	16·82	—	14·50	86·21	2·32
California:					
1920	17·66	81·44	15·97	90·43	1·69
1921	17·80	81·46	16·48	92·58	1·32
1922	18·48	82·71	17·28	93·51	1·20
1923	18·35	82·94	17·33	94·44	1·02
1924	18·63	—	16·98	91·14	1·65

In the light of these figures it does not seem impossible, if higher sugar contents can be obtained concurrently with high yields of beets per acre, that, by improved extraction, lower costs per lb. of sugar are outside practical sugar making methods. It is certain that to obtain improved yields and larger sugar contents and better extraction will require some years of experience on the part of British farmers, patient study in the breeding and selection of better strains of beet, highly efficient sugar experts who will be able to secure the maximum possible extraction, and up-to-date machinery.

Another essential factor in low operating costs in the factories is the necessity of a high acreage of beet per factory. The overhead charges on a factory which is idle for nine months of the year, and which requires considerable overhaul of machinery every year to keep it working efficiently, is bound to be very large. Factories do not come into existence until a minimum of some 4,000 or 5,000 acres is guaranteed by farmers. This is nothing like sufficient to keep them working at full capacity, but the Companies count on a greater acreage being grown and on better yields being obtained in the future. The average acreage grown for nine factories last year was slightly over 6,000 acres per factory, but while some may have been running at full capacity the majority would have contracted acreages much below their maximum requirements. This is a matter which requires the earnest consideration of every farmer. The industry has to live out of the money it obtains for the sugar sold, and to secure the maximum amount for distribution among the interested parties maximum efficiency is essential, and in the case of the factories this can only be secured by their being able to run at or near maximum capacity. It cannot, however, be expected that factories will always run at this maximum. The price offered by the Companies in any given year will determine the attitude of the farmers as to whether or not the crop can be remuneratively grown, and, therefore, in low price years there will be a contraction of acreage and probably a relative increase in factory working expenses. In 1920 in the United States ninety-seven factories were operating, and each handled on an average 8,989 acres of beet. The price slumped in the next year, and only ninety-two factories were operating, but the acreage per factory was only slightly less at 8,858 acres. The following year a further eleven factories were out of commission temporarily, but even with this reduced number of factories the acreage per factory dropped to 6,543. In 1921 five factories, and in 1922 sixteen factories evidently had to be maintained out of the profits of the remaining operating factories, which is the same thing as saying that there was a corresponding reduction in manufacturing efficiency, viewing the industry as a whole.

Low prices operate quickly against the least efficient growers, or those on unsuitable soils, or those who have poor market facilities, and it would seem, therefore, that care should be taken to erect factories only in districts where the conditions of soil and market are good, and where the crop is likely to be looked on as one of the mainstays of the farm. The arable districts of this country are undoubtedly the most favourable.

(*b*) Labour.

The extent to which it will be possible to extend the sugar-beet area is closely allied to the availability of labour, and the effect which its introduction will have on the labour requirement of any farm or in any given district is not an easy one to determine.

If a development up to 5·35 per cent. of the arable land is taken as applicable to those districts most suitable for the crop, it does not, on the face of things, seem to be an insuperable task to handle the crop on this small proportion of the arable land with the existing labour staffs. The matter, however, is not so simple as this would indicate. An average is built up of variable quantities. Some farms will not grow any beets at all, others will grow an acreage below the average and others again rise much above it. The position of the growers of the larger percentages are those who are likely to feel the effect of introducing an intensive crop, especially if they hold medium sized farms. A farmer on 800 acres, all arable, with 80 acres of beet (or 10 per cent. of the arable), employing 24 men may, by being able to concentrate his staff, find it comparatively easy to handle the crop, whereas a man on a 100-acre arable farm employing 3 men and growing the same proportion of beet as on the larger farm would probably have to find extra hands at certain seasons.

Exception might at first sight be taken to this statement on the ground that some of the most successful beet-growing districts on the Continent are those where small holdings prevail and a large proportion of the arable is under the crop, and American experience, also, is that the percentage of land under beet rises as the size of the holding falls. The position of the small holder is, however, really analagous up to a point with the case of the 100 acre farmer. The small holder could not himself handle the crop and would have recourse to other labour. But here the similarity ends, for the small holder is secure, in most cases, of sufficient reserve of labour in his wife and family upon whom he can and does call in busy times, whereas the 100 acre farmer has to find casuals on the labour market and this labour may be difficult to secure. The creation of further small holdings would therefore appear to be of advantage in assuring the extension of the beet area and in maintaining the area under the crop.

Where intensive farming prevails in any district it may not be necessary to employ additional labour. In the Lincolnshire and Cambridgeshire fens where crops of an intensive nature, like carrots, potatoes, cauliflowers, celery, and so on, are traditional and where therefore a large labour force is constantly employed, it seems fairly safe to say that sugar-beet would have little, if any, effect on the labour requirement.

On the other hand, in districts such as the high lands of Norfolk or in some thinly populated counties in the South Midlands, such as Oxfordshire, the effect of the introduction of beet would be to intensify the system of farming considerably. In such districts the development of the crop can only be a comparatively gradual one. The creation of a supply of labour can only be made possible by careful organisation and by offering attractive terms to the latent sources of labour in the various districts.

Labour for sugar-beet growing is required mainly at thinning and hoeing time and again at harvesting, and the amount a farmer can grow will be determined by the labour available at these times. Much depends on what crop is cut out in favour of sugar-beet before it can be said that casual labour is necessary, and if other hoed crops are displaced it may still be possible to handle the beets with existing labour staffs either by working overtime, or by paying piecework rates.

Granted, however, that casual labour is required at these times and that the demand for this labour varies with individual circumstances, the only solution seems to be either for the National Farmers' Union or, probably better, for the factories to arrange for the supply of casual hands for handling the beet crop. The fieldmen of the factories make periodical visits to each individual grower and they could make inquiries about the additional labour required on each farm. It should then be possible to organise available labour from the towns and villages. It is this class of labour, however, that farmers consider of little use for work on the farm. For example, the singling of beet is a somewhat skilled task and calls for workers who have had experience. This part of the work cannot be performed by people from towns as is done in the case of fruit-picking, pea-picking and hop-gathering. Something might be done by letting the permanent farm hands do the most important tasks and leaving the work of side-hoeing to unskilled men. At harvesting, after the beets have been ploughed out, the work is very largely mechanical and could easily be performed by unskilled people.

It is unfortunate that this period of intensity of work on the crop coincides with the maximum demands of the factories for labour, also mainly of an unskilled kind, to handle beets at the factories, and it would seem that careful selection of sites for factories is essential. To erect a factory in a rural or semi-rural area has the effect not only of drawing a considerable amount of labour from the land all the year round, but also of taking more just at the very time the farmer requires them to handle the crop which the factories must have. These reasons would seem to indicate that from an economic point of view the best position for a factory may be in or near towns or large villages, or in industrial areas, where a considerable reserve of labour could always be commanded without any interference with the agricultural supply.

(*c*) FOOD SUPPLIES FOR STOCK.

A further factor which must be reckoned with when the expansion of beet growing is under consideration is the effect it will have on the stock-carrying capacity of the country, and this again is not so simple a matter as would appear at first sight. As far as a single farm, or a number of farms, is concerned it would appear that, although the food value of the residues per acre of sugar-beet as measured by starch equivalent is less than that of an acre of mangolds, this deficiency can be easily made good by the purchase of dried pulp or of equivalent food at a price which would leave a good margin of profit to the farmer, when the money he receives for the sugar he sells off the acre at the present price is taken into account. It has been estimated that the starch equivalent value of the beet residues, namely, the tops, leaves and dried pulp, is about 1,387 lb. per acre, though this figure may be rather too high on the average, and in any case is variable within wide limits owing to the different methods of using the tops and leaves, and the varying quantities of sugar remaining in the pulp according to the methods of extraction used by the factories. To begin with, the quantity of tops left on the field varies considerably with the shape of the roots and with the fancy of the man who tops them. Some farmers prefer to cut off as little as possible, and to risk the expense of re-topping at the factory or the reduction of sugar content owing to the presence of an excess of that part of the root which is stated to contain least sugar. Others, with sheep to fold, may prefer to cut off a larger crown. Then again there is a great difference in quantity due to whether the tops are left lying thinly scattered over the field to be trodden in by beasts turned in to eat them off, or whether they are left in large piles which can be forked up into carts without much wastage. There is considerable variation, too, according as to whether the leaves are allowed to dry off before feeding, in which case they may become slimy and inedible, or whether they are fed fresh, or ensiled, or carefully dried, in which case the value of the leaves may be added to that of the crown of the root. It can be assumed, however, that the value of the tops and leaves for a good crop lies somewhere between 500 and 800 lb. of starch equivalent per acre. The dried pulp derived from an average acre of beet amounts to about 10 cwt. and the food value of this varies considerably according to the efficiency with which the factory extracts the sugar, but it may be taken to be in the neighbourhood of 580 lb. of starch equivalent. The total value of the food available for stock as a result of growing an acre of sugar-beet for factory purposes may be taken, therefore, at about 1,230 lb. of starch equivalent. It is interesting to note in passing that this is almost the exact equivalent of a 12-ton crop of turnips, though it is only about 60 per cent. of the food value of a 12-ton crop of swedes, and less than half the food value of the average crop of medium-sized mangolds, the deficiency when compared with the latter crop amounting to some 1,400 lb. of starch equivalent per acre. Although any one farmer may be able to purchase an amount of dried pulp that is greater than that derived from the beets sent by him to the factory in order to make up the difference, it is clear that, viewing the country as a whole, there is bound to be a deficiency of about the 1,400 lb. of starch equivalent already mentioned for every acre of beet grown in place of an acre of mangolds, of 786 in the case of an acre of swedes, and there would be no loss in the case of turnips. If, therefore, the development of the sugar-beet crop up to 200,000 acres were to take place at the expense of the mangold acreage, there would be less food for stock in the country by, say, 280 million lb. of starch equivalent. Now taking 45 lb. of mangolds containing 2·8 lb. of starch equivalent as a daily root ration for a dairy cow for five winter months, the above deficiency represents the year's root ration for some 670,000 dairy cows or their equivalent in other classes of stock. In other words, the equivalent in sheep or other stock of about 33 per cent. of the cows at present in the country would be deprived of their winter root ration. How far such a loss could be made good depends on the method of rationing adopted, but in any case supplies would have to be taken from sources not already fully drawn upon. Greater use, for example, might be made of imported concentrated foods to replace the bulky parts of the ration, as is so strongly recommended by Boutflour, and as far as the cost of buying in the equivalent amount of these foods is concerned, it has already been reckoned that the proceeds from the sale of the beets to the factory should leave a fair margin for this purpose. As far as swedes, for example, are concerned additional evidence may be adduced from Lincolnshire, where it is the custom to reckon eight sheep per acre of roots for the winter, and where it is claimed that beet tops will carry but two. It can be calculated that the pulp derived from the same acre would carry the equivalent of a further two sheep, and it would seem that, assuming the roots displaced in this case were swedes, the total value of an acre of beet residues would be about half that of an acre of sheep-keep. Where mixed sheep-keep is displaced the loss would be somewhat less. Then, again, the comparison so far has been restricted to the acre of beet as against the acre of other roots, but it is contended by many of those who have a knowledge of conditions of agriculture in beet-growing countries that the cultivation of beet results in a general improvement of the land and in enhanced yields of subsequent crops. There is already some evidence in this country of the truth of this contention, and any loss of starch equivalent due to growing beet instead of other roots may, therefore, be partly counterbalanced by the increased output of starch equivalent in other forms throughout the rotation. In fact, it may well be that the loss of food value is not as serious as appears at first sight. Further evidence on this point may be drawn from the Final Report of the Agricultural Tribunal of Investigation. The following table, constructed from information derived from that source, shows the yields per acre of some important crops and the number of live-stock units carried per hundred acres in various beet-growing countries compared with similar figures for Great Britain :—

TABLE XV.

Beet-growing Countries compared with Great Britain, as regards (A) Yield of Crops, and (B) Livestock Carried.

	Average Yield per Acre				Livestock units per 100 acres of crops and grass, excluding rough grazing
	Wheat Cwts.	Barley Cwts.	Oats Cwts.	Potatoes Tons	
France, 1911–13 . . .	10·5	11·2	10·6	3·5	(1913) 20·4
Germany, 1911–13 . .	17·7	17·0	15·7	5·5	(1913) 30·8
Belgium, 1911–13 . .	20·7	22·0	18·4	7·8	(1912) 47·0
Holland, 1919 . . .	20·7	21·0	15·0	6·4	(1922) 44·9
Denmark, 1919 . . .	23·8	18·4	13·9	6·0	(1922) 39·4
Great Britain, 1919–22 .	17·2	14·6	13·0	6·2	(1922) 33·1

It is seen that of the six countries Great Britain ranks fifth as regards yield of wheat, barley and oats, third as regards yield of potatoes, and fourth as regards livestock carried. It is interesting also that France, a country whose percentage of arable land sown to beet is less than that of any of the other countries except Great Britain, ranks last in every case. It is not desirable on the strength of these figures to lay too much stress on the value of beet as producing higher crop yields and a greater head of stock, for beet-growing is not the only factor involved. There are many factors contributing to this state of affairs, among which intensity of cultivation and systems of land tenure, especially, play an important part, but at least it may be inferred that the cultivation of beet is far from being incompatible with higher yields of crops and greater stock-carrying capacity than obtain at present in this country.

4. SUMMARY AND CONCLUSIONS.

An attempt has been made in the foregoing remarks to forecast the probable trend of events in relation to the sugar-beet crop in England and Wales, and in some measure to suggest to farmers points which would naturally arise in their minds when considering the introduction of this crop, and to indicate the lines along which a solution to such problems may be found.

It has been shown that sugar-beet is a crop which has quickly established itself in many different countries under a variety of conditions, and that it plays no small part in European agriculture. An outline has been given of its progress in the United States of America, where it has been demonstrated that the crop, even within the wide range of climates and soils suitable for its growth, tends to become localised, because of the labour situation, and the competition of other crops. On the latter point, however, it should be observed that Harris claims that the crop, once established, has little difficulty in competing with ordinary farm crops, and that sugar-beet regions are usually profitable livestock sections.

Viewing the development which has taken place in several countries, especially in Europe, an attempt has been made to estimate the probable expansion of the crop and the part which it may be expected to play in this country. Problems which will have to be faced as a result of a falling subsidy have been mentioned, and an endeavour has been made to draw lessons from developments in the U.S.A., where the introduction of novel practices is not hampered by the existence of long-established traditions. Attention has been drawn to possible reductions in cost by increased yields and improved factory methods, and an indication has been given of the trend of possible costs, taking into account all the advantages likely to accrue from growing the crop.

Problems of labour supply have been discussed. It is probable that from the agricultural point of view it may be sounder economically to develop the crop gradually on many farms, thus giving the opportunity to build up a steadier and more permanent employment of regular agricultural labour, rather than by rapid expansion on a few farms to create a sudden demand for casual hands. In the meantime there may be a tendency for some farmers to grow more beet than they can manage with permanent labour, and, since it is in the interest of the factories that they should do so, it seems reasonable to suggest that the factories should help to supply any additional casual labour required at busy periods.

Some mention has also been made of the effect which the introduction of the crop may have on the supply of feeding stuffs grown on the land.

Apart from future developments, it is clear that at the present juncture the crop, when properly handled under suitable conditions, should leave a good margin of profit to the grower. In support of this contention it may be stated that the average cash profit, after meeting all charges on the crop, was £4 1*s*. 4*d*. per acre on eleven light land farms in 1924, and £2 17*s*. 7*d*. per acre on twelve farms on medium and heavy soils, though in some cases the cash profits were considerably higher and in one case amounted to as much as £13 6*s*. 5*d*. per acre.

It is suggested that with margins of profit such as these there is every incentive for all farmers, who are in a position to do so, to give the crop a serious trial. As has been stated elsewhere by the present writers, " the market is assured, the price is fixed beforehand, and the additional equipment required is of a nature to require no serious outlay of capital. The crop adds another product to the output of the farm and creates an entirely new market for the farmers of this country. To this extent depressed conditions can be met by an increase of production without the danger of over supplying the market with the staple products of the farm."

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FARM INSTITUTES AND THEIR WORK.

Education of any kind is contentious. Even where the object is general mental development of the pupil rather than specific preparation for a particular calling, there are differences of opinion as to the best means of attaining that end. One school of thought, for example, emphasises the value of classical studies ; another attaches more importance to modern literature ; the aim of a third school is to inculcate the scientific outlook ; while in the opinion of a fourth, games are not merely a form of recreation but perhaps the principal educational instrument. It is not to be surprised at, therefore, that there should be differences of opinion as to the best kind of training for a particular vocation.

Vocational education, except for the so-called learned professions, is of comparatively recent development. It has had to overcome the apathy of those whom it should benefit and to encounter the opposition of educationists, who could not appreciate the function of studies in subjects other than those recognised for the purposes of the ordinary academic degrees. Proposals to institute University courses in such prosaic matters as Coal Gas and Tanning met with ridicule; but with the gradual recognition of the value of scientific knowledge in industry, a demand has grown up for men possessing academic qualifications in technology, and in the modern universities technical students now form a considerable part of the total enrolment.

Agricultural education has encountered no less and perhaps no greater difficulties than other forms of technical training; and it has shared with these in the growing appreciation of the results of scientific research which has been apparent during the past twenty years. There is still, however, wide diversity of opinion as to the kind and length of training most suitable for the embryo farmer. At the one extreme is the city man who imagines that his son, if he secures an agricultural degree or diploma, will forthwith be able to farm profitably, either as tenant or as bailiff, or perhaps be able to engage in teaching farmers how to farm. While he would be the first to point out that his own particular kind of business or profession could not be mastered without some years of actual experience in it, he does not quite realise that the same applies, and with at least equal force, to the business of farming.

At the other extreme may be the self-made farmer, who has succeeded, perhaps achieved unusual success, in spite of his lack of academic training. Such men are usually endowed with exceptional powers of observation and memory, as a result of which they can make great use of their experience. Men of this type often regard institutional training as being remote from the path to practical efficiency; the time a young man would devote to college studies might, they believe, be better spent in gaining experience and at the same time earning money that would prove more useful than "book knowledge" when the time came to stock and equip a farm.

Between the two extremes above illustrated is an ever-growing body of practical farmers who recognise that modern husbandry affords scope for the application of knowledge and understanding which the average individual cannot or does not gain by routine experience and ordinary observation, but which can be imparted by competent teachers in a systematic course of instruction. Farmers who read and make full use of the technical advice now at their disposal may admittedly become well versed in the principles of manuring, feeding, breeding and other technical matters of immediate interest; but such as have the disposition, not to say the time, for technical studies are just those who most regret not having had the advantage of institutional education in these matters before commencing to farm on their own account.

Agricultural education as now organised provides for the needs of different types of student, and courses are available which are suited to the means and opportunities of pupils in different stations of life. The large farmer works with his head more than with his arm and has greater opportunities of utilising technical knowledge than has the smaller occupier, whose personal labour may form a considerable proportion of his earnings and whose personal skill in manual operations may be essential to the conduct of the farm. The typical agricultural college course, extending over three years, has been developed mainly in accordance with the ideas of large farmers as to what studies may best supplement practical experience in the preparation of the mind for extensive farming. Three years, moreover, is not too long a period over which to spread these studies when the student aims to acquire a good and ready knowledge both of the different branches of field and animal husbandry and of the

FIG. 1.—The Hertfordshire Institute of Agriculture, Oaklands.

many allied subjects, such as chemistry, physics, botany, bacteriology, zoology, geology, economics, accountancy and law. It is most desirable that the farming industry should include, as it already does, men actually engaged in farming who can follow the progress of research in the different aspects of agricultural science and discuss the results with advantage both to their fellows and to the research worker.

On the other hand there are large numbers of farmers' sons whose parents depend largely on their manual assistance and who, therefore, cannot afford either the time or the expense to attend long courses of instruction. For such as are unable to leave home for instruction on more than one day per week, there have been arranged in some counties day courses at local centres, where lectures and demonstrations are given in the outstanding principles of field, animal and farm management, with special reference to the conditions of the district in which the class is held. Separate classes are arranged for women students, in which such subjects as dairy work, poultry keeping and domestic economy take the place of the more strictly agricultural matters taught to men students.

Between the college diploma course extending over three years and the county day class meeting on one or two days per week for some ten to twenty weeks, there is a considerable field for intermediate agricultural education. This is the place and function of the Farm Institute, which forms part of the scheme of County Council activity, as distinct from agricultural colleges, whose governing bodies have a wider representation and whose upkeep is assisted by direct grants from the Ministry of Agriculture.

The typical farm institute comprises a farm of medium size, residential accommodation for between 20 and 50 students, together with lecture rooms, laboratories and the staff necessary for teaching "the scientific principles underlying sound practice." During the winter, from October to March, men students receive courses of instruction in soils, fertilisers, crops, live stock, feeding, veterinary hygiene, implements and machinery, weeds and pests, farm arithmetic, bookkeeping and general agricultural science—chemistry and biology. Ordinarily the course is completed in one session, but students desiring more advanced instruction in one or more subjects can have special arrangements made for their needs. During the summer months women students attend for lectures and practical work in dairying, poultry keeping, horticulture, housewifery, and other subjects of special interest to this class of pupil. Special courses in fruit growing, market gardening, etc., may be held in particular institutions serving counties where these industries are of special importance.

The fees vary at the different institutions, but for sons and daughters of residents within the County owning the Institute, the fee is generally between £1 and £1 10*s*. per week for board, lodging and tuition. Higher fees are payable by pupils from outside the County. A limited number of scholarships are awarded at farm institutes (*a*) by the County Councils concerned, and (*b*) by the Ministry of Agriculture and Fisheries, under the Scheme for establishing scholarships for the sons and daughters of agricultural and other rural workers.

In the farm institute course, most of the student's time is taken up with studies in subjects which he cannot fail to recognise as being of direct practical importance. In that sense the institute course is more "practical" than the college course; but inasmuch as the tuition is given during the winter months, when field operations are necessarily limited in kind, systematic practice in manual processes cannot be the main feature of farm institute instruction. Moreover, the right kind of student can spend his time more advantageously in the class room than in performing operations with which he ought to be already quite familiar. This, however, may not apply to workshop practice, grafting, hedge-laying, cheese-making and other special operations, not to mention the usual forms of practical work, such as

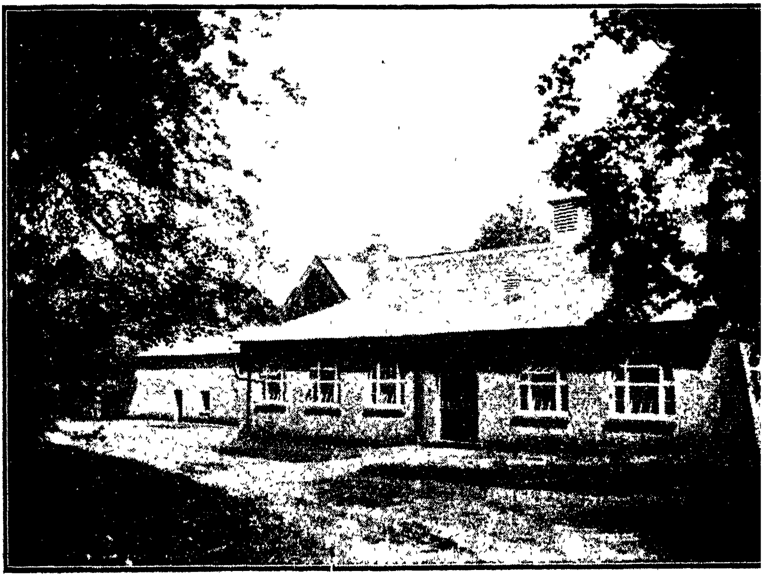

Fig. 2.—The Dairy at Oaklands.

live-stock judging, identification of pests, weeds and seeds, which form a regular part of the course.

The farm institutes first founded in this country were those at Basing (Hants., 1889), Ridgmont (Beds.), and Newton Rigg (Cumberland). Hampshire still maintains an institute at Sparsholt, and the Cumberland and Westmorland County Councils continue to co-operate in running the Farm School at Newton Rigg; but Ridgmont, which was originally established by the Duke of Bedford, has been closed for more than ten years. Farm Institutes primarily intended for practical dairy instruction are those at Hutton (Lancs.), Worleston (Cheshire) and Garforth (Yorks.). Cheshire formerly maintained the Holmes Chapel Agricultural College, an institution distinct from the dairy school; but recently agricultural education in this county has been centralised at Reaseheath Hall, where a modern farm institute has been established. In Lancashire the agricultural and the dairy schools are still carried on in different institutions, but during recent years the agricultural courses have been shortened and modified, so that the attention of students may be directed more towards their preparation for the business of farming than towards obtaining diplomas.

The above-mentioned establishments date their origin from the time when the newly formed County Councils were endowed with "The Whiskey Money" and with power to employ the proceeds of a penny rate in the furtherance of technical education. The County Technical Education Committees early gave attention to agricultural instruction; and fortunately different ideas prevailed in formulating their policy. In Northumberland it was decided to establish a County Experimental Farm, and thus originated the famous Cockle Park experiments. Most counties made attempts to provide itinerant instruction and some—Cornwall, Devon, Gloucester, Hereford, Monmouth, Stafford, Somerset, Warwick and Wilts—succeeded along these lines, employing a staff of instructors responsible direct to the County authority. Others as above mentioned set up farm institutes.

The policy of some counties was influenced by the Board of Agriculture, which came into existence about the same time as the County Councils. The Board had certain duties concerning, and small grants available for agricultural education, and decided to encourage and assist the setting up of University agricultural departments and agricultural colleges. Its object was to have a centre of this type within each group of counties: it confined its grants to aiding the work of such centres, and endeavoured to obtain for the colleges financial assistance from the surrounding counties. In some cases the result of the counties making grants to the college was that, while their grants were too small to enable

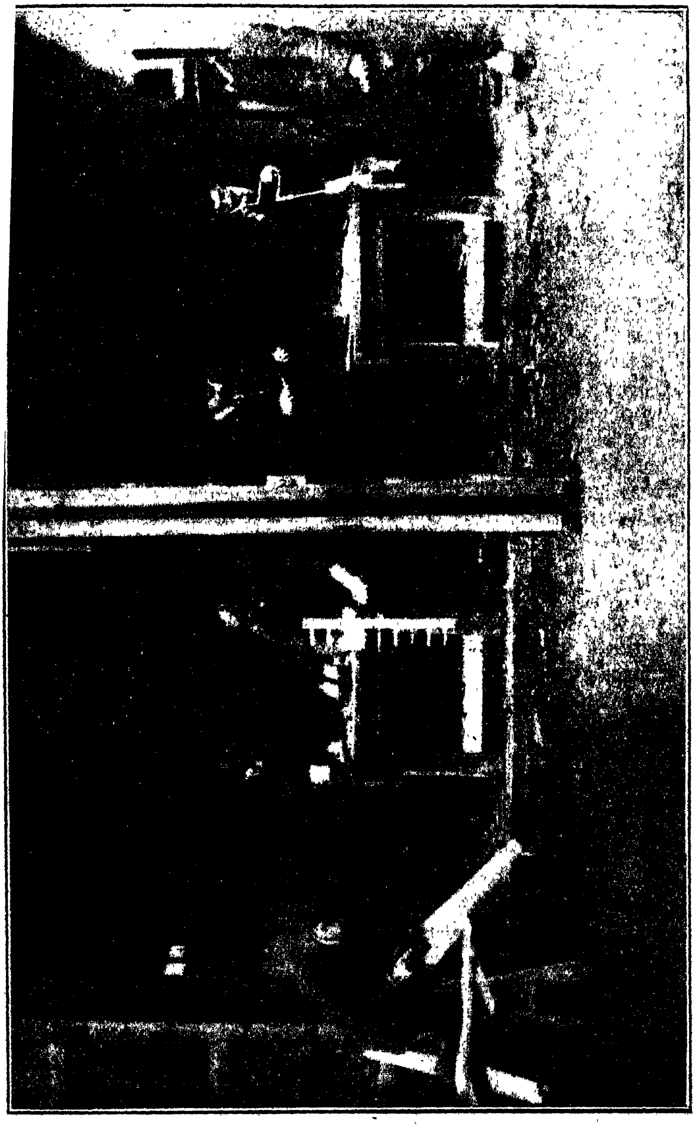

FIG. 3.—Carpentry Class at Chadacre Agricultural Institute, Suffolk.

the college to carry out much work in the counties, the local schemes were entirely suspended.

Interest in farm institutes was revived on the proposal of Lord Reay's Departmental Committee, which reported in 1908 (Cd. 4206) in favour of setting up such establishments throughout the country in order "to give definiteness of aim and stability to county work." The Institute contemplated by the Committee included a permanent headquarters for the itinerant instructors then employed by many Local Education Authorities, and buildings suitable for winter classes in general agricultural subjects and for instruction in dairying during the summer months. To these institutes the Committee recommended that demonstration farms should be attached.

Lord Reay's Committee's proposal was taken up by the Board of Education, who, in 1911, submitted to the Development Commissioners a scheme for the development of farm institutes. The scheme was approved by the Commissioners, but before it was actually brought into operation the Boards of Agriculture and Education came to an agreement whereby the scheme should be entrusted to the former. Before much progress had been made with the organisation of new farm institutes, the War intervened. In 1918, however, the Government, on the recommendation of Lord Selborne's Reconstruction Sub-Committee, decided to assist agricultural education on a more extended scale, so that the Ministry of Agriculture could make capital grants on the 75 per cent. basis for the establishment of institutes without reference to the Development Commissioners. An immediate extension of local activity in this direction was being organised, but in 1920 the Cabinet prohibition of further expenditure on new schemes arrested the movement. Some relief was, however, obtained under the Corn Production Acts (Repeal) Act, 1921, under which funds were set aside for agricultural education, and from this source assistance has been provided to local authorities who had actually embarked upon farm institute schemes when the prohibition of 1920 was issued.

Counties that have set up farm institutes since 1918 are Cheshire, Hertfordshire, Holland (Lincs.), Northamptonshire, Somerset, Staffordshire, Carnarvonshire, and Denbighshire. Monmouthshire has benefited from local generosity in connection with the Usk Institute, which serves that county; and recently the Chadacre Agricultural Institute was endowed by the Earl of Iveagh for the benefit of students from the county of Suffolk. In Durham and Kent farms have been acquired, but arrangements have not yet been completed for the reception of students. Certain other counties have schemes under consideration or in course of execution.

There are still points on which farm institute policy is not

FIG. 4.—Hedging Class at Chadacre.

fully settled. Lord Reay's Committee regarded the farm as the main part of the scheme, urging that the County lecturer could not maintain his practical skill and carry weight with farmers unless he himself was actually running a farm. Experience has shown this to be an incorrect view ; it would be as reasonable to expect a medical practitioner to have personally suffered every complaint on which he may have to give advice. It is obvious that the more the teacher is restricted to the experience he can gain on a particular farm, the less experience he can obtain on the farms in the County. A farm attached to an institute is useful both in assisting the teaching given in the courses and in providing experimental results ; but the person responsible for its management must not be expected to spend a large part of his time in lecturing, visiting and advising other farmers how to manage theirs.

Whether the farm institute should serve as the working headquarters of the county itinerant staff is another debatable point. In some cases that is possible, but for the convenience of farmers seeking advice, an office in the principal market town may be preferable. Indeed, decentralisation may in some counties be a still better plan.

The other questions are those of the age of the pupils to be admitted to farm institute courses and the desirability of including general educational subjects in the curriculum. Recently the Ministry of Agriculture and the Board of Education have extended their agreement so that pupils between the ages of 14 and 16 not in attendance at schools supported by the Board may participate in schemes eligible for grant from the Ministry. This opens up the possibility of making use of farm institutes to fill a gap in our schemes of rural education. Many of the sons of smaller farmers attend only the public elementary school, which they leave at the age of 14 years. At this age they cannot continue their education at a secondary school, as the age for entering upon secondary school courses is 12 or under, and their parents would not agree to the usual condition that they should remain for a period of four years. If the boy goes from the elementary school to work on the farm, then by the time he has reached the age of 16 he will have lost much of the benefit of his previous schooling ; he may have no desire to attend a farm institute, and if he has, his services will have become so useful on the farm that they cannot well be spared. If boys of the age of 14 are to be admitted to special courses at farm institutes, however, the curriculum of these special courses might well include general preparatory subjects and some attention could be paid to general culture as well as to technology.

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SOME CAUSES AND EFFECTS OF CHANGES IN PRICES OF FARM PRODUCE.

PRICES are values expressed in terms of a common monetary unit, and are fixed in the process of exchange of goods. Their function is to facilitate exchange, but their influences do not stop with the mere processes of purchase and sale. In effect, prices act as regulators of the production and consumption of goods. While there is no conscious social control of production or of consumption the prices of commodities, of land, of labour and of capital are the sole regulators of production. The producer adjusts his purchases of the means of production and of raw materials according to the prices which he has to pay for them and according to the prices he expects the finished products to command. Practically all consumers have to choose between possible satisfactions of different wants and desires. For everyone certain elementary wants are of pre-eminent importance, and must be satisfied; but these elementary wants are not identical or of equal importance to all people. Consumers choose to some extent even in the satisfaction of elementary wants, and in their choices they are guided or influenced considerably by prices. But when the most elementary wants are satisfied the prices of goods or services largely determine the satisfaction of other wants by further expenditure. And by the choice between one thing and another, based largely on prices and wholly on prices in relation to wants and the means of satisfying them, the consumers regulate production.

Thus if the forces which fix prices in general were constant the price for a given article would regulate the production of that article according to the effective demand for it. A change in the price of an article would represent a change in consumers' valuation of it. Thus if meat became dearer when prices in general were steady, the increment in price would represent an increase in valuation. The cause might be either an increase in the cost of production or an increase in the consumers' valuation consequent on some other cause. In either case the price would be influencing and indeed regulating production. An increase in cost of production of meat would cause a restriction in the supply unless the price rose in equal ratio to induce producers to continue the provision of the supply required. Or an increase in consumers' valuation of meat would cause an increase in the price which would bring increases in the supply to meet the greater demand.

If prices merely acted in this way, and upon each commodity separately, they might regulate production so that, with the means available at any time, it would meet all effective demands and satisfy all wants for which sacrifices would be made. This method of price-fixing by bargaining between producers and consumers in the market may be clumsy and sometimes slow moving, but it differs from any other method only in degree if it differs at all. For if conscious and organized regulation of prices is not to restrict either demand or supply it must take into account all the factors which are operative in the markets and assign to them much the same importance as they there secure for themselves. Organized regulation of prices may be directed to the regulation of demand or of supply, or of both; but any regulation which does not bring supply and demand into equilibrium is exceedingly difficult to maintain.

Unless any regulation of the price of even one article is carried on with the fullest possible information and with the object of bringing supply and effective demand into equilibrium it may be more clumsy and may have more undesired results than the undirected bargaining between producer and consumer. But, as regards agricultural production, both the undirected bargaining of the market and attempts at organized control of prices may fail to regulate the supply of commodities. This is due to the varying response of nature to the application of given means and energies in production. Not all of the means and forces of agricultural production are subject to monetary valuation or the regulation of application through prices. Rain and frost, wireworm and "fly," with many other similar things are factors in production which are unregulated by prices. And in so far as other industries depend upon raw materials, etc., produced in the primary processes which are covered by the term "agriculture," their costs and prices are likewise affected by the uncertainties of production which are due to the vagaries of nature. But, on the whole, the factors in their costs of production and in the prices of their finished products are more amenable to measurement by monetary standards.

Thus, one cause of changes in prices of farm produce is to be found in the different yield of produce given, in different seasons, for equal amounts of materials and energies applied in production. Good instances of this from English farms are to be found in the yields and prices of hops, of fruit, and of potatoes. During the last fifty years many a "good year" as regards yields of hops has caused losses or even disaster to growers.[1] With fruit and much perishable vegetable produce the yield in prolific seasons may be far in excess of all the demands, and the pressure of excessive supplies on sensitive markets frequently causes prices to slump to a level which does not

[1] *Report on Stabilisation of Agricultural Prices*, Ministry of Agriculture Economic Series No. 2, pp. 40–42.

cover costs of production.[1] In another year a relatively short supply may bring handsome profits. But one of the most important illustrations is to be found in the case of potatoes. From 1915 to 1923 the acreages, yields and values of potatoes in England and Wales have varied as follows :—

POTATOES IN ENGLAND AND WALES.

	Acreage (000)	Yield. Tons per acre	Total Produce (000 tons)	Estimated Value (000 £)
Average Year, 1911–13 .	445	6·0	2,662	9,117
,, ,, 1915 . .	463	6·2	2,858	11,718
,, ,, 1916 . .	428	5·9	2,505	23,895
,, ,, 1917 . .	508	6·6	3,341	22,051
,, ,, 1918 . .	634	6·6	4,209	32,304
,, ,, 1919 . .	475	5·7	2,733	29,653
,, ,, 1920 . .	545	5·8	3,151	30,722
,, ,, 1921 . .	558	5·3	2,958	22,185
,, ,, 1922 . .	561	7·1	4,012	13,290
,, ,, 1923 . .	467	5·9	2,758	18,846
,, ,, 1924 . .	452	6·0	2,696	—

Several changes are indicated in these figures, notably the increase in area under potatoes during the War and the increase in prices of potatoes with that in general prices from 1914 to 1920. But the effect of increase in the yield per acre and in total produce in 1922 is clearly shown in the value for that year. General prices were then falling, but they were not falling to the extent to which that of potatoes fell. But in the following year, with about normal acreage and nearly normal yield, the total value rose over 40 per cent. with much smaller total yield. The effect of a small shortage in 1916 is also remarkable.

The reason for this effect of high production on prices is to be found in the relative "inelasticity" of demand.[2] It is generally assumed that if the price of a commodity falls the demand will increase, and that as the price rises the demand will diminish. Thus an increasing demand should tend to stop the price falling, or a decreasing demand should tend to stop a price rising. But in none of the cases quoted is the elasticity of the demand so great as that of the production or that of price. The case of hops is peculiar, so that it need not be treated at length. With potatoes, however, a relatively big decrease in price would be required to induce an increase of 5 or 10 per cent. in normal demand and consumption, and quite a big rise in price is required to cause an appreciable decrease in demand and consumption.

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[1] *Report on Fruit and Vegetables* (Linlithgow Committee), Cmd. 1892, 1923, pp. 24–25.

[2] "The elasticity of demand in a market (or for a commodity) is great or small according as the amount demanded increases much or little for a given fall in price, and diminishes much or little for a given rise in price."

The remedy suggested against these fluctuations in prices which are caused by changes in yields through variations in the seasons is usually that of finding alternative markets for surpluses through alternative uses. This remedy, however, is not frequently available. When alternative uses necessitate the use of plant and equipment (as in the case of use of fruit for jams) that cannot be used economically in the treatment of surpluses only. Moreover, there are many cases in which even the alternative uses of surpluses tend to restrict the original market for the fresh product. The real remedies consist in the discovery of methods of reducing variations in yields, and then in securing the planting of areas sufficient, with average yield, to meet the estimate of normal consumption. Thus only can prices be kept at or near levels which are fair to producer and consumer. Doubtless, the regular producers of hops or potatoes gain the profits necessary to secure the continuance of the supply. But they gain them irregularly, and in the process of guessing at the market and the intentions of other producers a minority of the producers lose money and an enormous amount of labour and materials are wasted. As regards the discovery of methods of reducing variations in yields, it is probable that the natural sciences can render to farmers aid of greater financial value by making yield more certain than by making production cheaper.

For many of the common products of the farm, especially those which meet the primary wants of man, the demand is inelastic. For meat and milk the demand shows considerable elasticity, but for breadstuffs the demand is inelastic. Indeed, for wheat for breadmaking the demand is slightly elastic in a way quite different from the ordinary case of demand. A rise in price beyond the level which is normal for a given period may cause an increase in the demand because dearer bread reduces consumption of other foodstuffs by the poorer classes and thus increases their requirements of bread. But there is no other instance of this kind, nor is there likely to be.

There is also another common case in which prices do not regulate production in agriculture: when there are variations in supplies due to seasonal changes which are normal from year to year. Thus in the case of eggs, the highest point is to be found in November or December in any year. During December prices fall, though they may harden or rise a little in January.

They then continue to fall until April, when the lowest point for the year is reached about the middle of the month. After that a steady rise begins and is continued until August. A sharper rise may begin sometime in August or September and will continue until about the end of November.[1] For eggs in Welsh markets the variations in 1924 and 1925 can be shown.

MAXIMUM VARIATIONS IN THE PRICES OF WELSH EGGS, 1924–25.

	1924		1925	
	Price per dozen	Per cent.	Price per dozen	Per cent.
	s. *d.*		*s.* *d.*	
Highest—January . . .	2 6¾	261·28	2 6	230·77
Lowest—April . . .	0 11¾	100	1 1	100
Highest—November . .	3 6¾	363·83	3 8½	242·3

For April the production of eggs in Wales is estimated at about 633 thousand per day, but in November it would not be more than 152 thousand.

The position is similar though not quite so marked in the case of butter. Prices of butter in Welsh markets, for instance, show more or less regular seasonal movements as follows :—

From the beginning of March prices decline regularly until June, when they invariably touch their lowest point. With a slight increase in July, prices advance considerably in August and September, and the rise is maintained at a regular, if slower, pace to the end of the year. From December the price may continue to rise until the middle of February, but sometimes weakness or a tendency to start a decline is shown in January or February. It will be seen from the figures given below that the range of prices is narrower than in the case of eggs.

MAXIMUM VARIATIONS IN THE PRICES OF WELSH BUTTER, 1924–25.

	1924			1925		
	Week ending	Actual Price per lb.	Per cent.	Week ending	Actual Price per lb.	Per cent.
		s. *d.*			*s.* *d.*	
High . .	Feb. 9–16	2 3	152·11	Jan. 10	2 4¼	148·7
Lowest . .	Jun. 7–14	1 5¾	100	June 27	1 7	100
High . .	Dec. 31	2 4¼	159·15	Nov. 28	2 2½	139·47

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[1] J. Morgan Jones. *The Poultry Industry of Wales*, pp. 23–26. Also *Marketing of Eggs*. Economic Series No. 10, pp. 13–14.

The similar position with regard to milk is well known. In all these cases periods of low prices coincide with periods of easy production and heavy supplies. Here production appears to be regulating price, but this is not the case. If any of these commodities were produced only in the period of heavy supplies and low prices the prices required to secure continuance of production would be higher than they are under prevailing circumstances. To secure continuance of supplies, prices throughout the year must be sufficient to cover the necessary costs of the normal producer who is producing throughout the year. Individual producers whose supplies show variations from those which are normal may gain or lose in consequence. Thus the egg producer with relative heavy supplies from August to February will gain if his total cost per egg is not much higher than that of the normal producer. On the other hand, the producer with relatively heavy supplies from March to July must lose unless his total cost per egg throughout the year is much less than that of the normal producer. Similar considerations apply in the case of liquid milk and of butter.

In all of these cases there are two possible methods of steadying prices to some extent and also of bringing total receipts nearer to a remunerative level.

(*a*) Changes in methods of primary production tending to steady supplies by increasing them in the periods of relative shortage and decreasing them in those of present surplusage.

(*b*) Changes in methods of marketing produce produced in "natural" periods made possible by storage; or

(*c*) Alternative use of product during periods of heavy supplies.

In the case of eggs the first two methods can be applied, and offer some prospect of improvement in the total market conditions. Milk and milk products require the application of all three methods for the regulation of the market. The sales of liquid milk are heaviest during the period of large supplies and low prices. But the increase in consumption does not equal the increase in supplies. Therefore supplies of butter, which is manufactured to some extent all the year round, are increased. These are not necessarily marketed, but they have generally been so because methods of preservation reduced quality and the gain in price with the cost of storage did not induce general regulation of supplies. Cold storage may change this position to some extent. But the chief equalizer of the milk and butter markets is the alternative use of milk for cheesemaking. There are farms on which cheese is made during every month of the year, and there are others on which the production of milk is directed mainly towards getting the bulk of supplies during the months in which cheese is made most easily. Yet the manufacture of cheese is definitely directed to the equalizing of the markets for butter and milk, but especially for liquid milk.

The effect of these seasonal changes in supplies on the markets is not good for the producer. High prices during the periods of short supplies have a very restrictive effect on demand. From the beginning of December each year there is a small increase in production of eggs and this brings with it a fall in price much greater than is proportionate to the increased supply. Consumers restrict purchases when prices are high and only slowly adjust their requirements to new conditions. Less is known in detail about the supplies of butter than of eggs, but there is reason to believe that the same principles apply in regard to supply, demand and price. On the whole, steady prices which bring in a given return on a certain quantity of supplies throughout all the seasons of the year tend to create a bigger demand than violently fluctuating prices for an equal quantity of goods which would yield the same return. Supplies must vary to some extent according to seasonal conditions, but it is to the producer's interest to keep prices as steady as may be possible. The attempt to steady or equalize supplies may raise the unit cost of the commodity throughout the year, but the maintenance of steady supplies tends to create a steady demand at a price which will adequately cover the extra cost.

There are other types of seasonal changes in the price of one commodity, as the well-known seasonal variation in the price of wheat.[1] In this case the causes are complex. Heavy supplies are marketed during the autumn, when prices are apt to be at their low point for the year. But during this period the water content of the wheat is said to be high and the flour yield to be consequently low. There is also another factor. The " soft " or " weak " English wheat is used for blending, and the immediate demands of millers are for only those quantities required in the blends. Some flours for purposes other than breadmaking are made wholly or almost wholly of " weak " wheats. But the main demand for the " weak " wheats is for blending. In this, English wheat has some competitors and the demand for it depends to some extent upon available supplies of other " weak " wheats. In so far as the seasonal variations in prices are caused by changes in the quantities marketed they may be reduced to some extent by the actions of producers, but variations due to seasonal changes in quality or to seasonal changes in demand will always be reflected in prices.

Another case of seasonal marketing is that of barley,[2] heavy sales occurring in October, November, and December. Then the price is at its highest level for the year because of the quality of the product marketed. Here the sale offers are made to meet the demands of maltsters, and the heavy marketing at the required period probably has a good effect on prices. In another but less important case similar conditions are found. The bulk of the oats sold off Welsh farms return to other farms to be fed to stock, and the bulk of the sales are made in October, November, December, January and February. Many of the heaviest sales are made in the first three months, when the oats are actually required for feeding purposes. When seasonal sales are made to meet active demands, as in these cases, the effect on prices is good rather than otherwise.

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[1] See *Stabilisation Report*, pp. 43–47; and *Report on Agricultural Credit*, Economic Series No. 8, pp. 17–21.

[2] See *Report on Agricultural Credit*, Economic Series No. 8, p. 17.

There are other special causes of changes in prices of commodities produced on farms, as in the case of the "cyclical" fluctuations in prices and numbers of pigs. A treatise would be required to deal fully with these fluctuations, but the regularity of the changes can easily be seen.[1] The causes suggested are largely those of trade optimism and trade pessimism working in the minds of producers. "High prices stimulate production: production is increased until it exceeds demand and prices fall. The losses or diminished profit thus brought about lead farmers to contract production and prices once more rise. Thus a cycle of rising prices and expanding production followed by falling prices and contracting production is set up, carrying in its train many costly miscalculations and unavoidable losses." The causes assigned are scarcely adequate to the effect, but doubtless the difficulty of estimating the future conditions of the market for pigs has presented a big obstacle to development and has tended to discourage production.

But the most important changes in prices are those which are more or less common to all commodities and have a common cause. These are known as *changes in general prices*, and they have their origin in changes in the supply of money in relation to the amount of goods which it is required to exchange. An increase in the supply of money will cause an increase in prices when the supply of goods to be exchanged remains stable. Or an increase in the supply of goods while the supply of money remains stable will cause a decrease in prices. Thus the increasing supply of silver raised prices in this country in the sixteenth century. The discovery of gold in California and Australia in the middle of the nineteenth century also caused a rise in prices; but shortage in the gold supply after 1874 caused a fall in prices. A slight increase in prices was again caused by increased supplies of gold between 1896 and 1914.[2]

[1] *Stabilisation Report*, pp. 22–24.

[2] C. F. Layton. *Introduction to the Study of Prices*, Chs. 6, 7 and 8.

The supply of money, however, is not limited to the supply of coin and bullion, nor is it even to be regarded merely as a quantity. It is rather to be conceived as the flow of the media by which exchange is carried on. The supply of circulating media is made up of:—

(*a*) The quantity of money (cash and notes) in circulation.
(*b*) The rapidity of circulation of cash and notes.
(*c*) The amount of bank deposits against which cheques may be drawn.
(*d*) The average frequency with which deposits are drawn upon.

Thus the supply is made up of a moving volume, of which the power is determined by the quantity of things used for making exchanges and the rapidity of their movement.

The total of the exchanges to be made by the supply of currency might be called the "volume of trade" were it not that it includes many transactions not commonly described as trade. They include all sales and purchases of goods and services, all sales and purchases of property and "securities," payments of debts and subscriptions and the making of gifts. But the chief items are the quantity of goods produced, and the number of times they are exchanged between the primary producer and the final consumer; with the quantity of personal services which are paid for.

The general level of prices is the result of fitting together the supply of currency and the volume of transactions. Without suggesting a rigid analogy, an illustration may be attempted. The volume of trade or transactions is the channel in which the flow of currency runs. If the flow of currency rises while the channel remains of the same dimensions the level rises. If the channel increases in breadth while the flow of currency remains the same the level will fall. But the power of the unit of money falls as the level rises, and rises as the level falls.[1]

Several changes in the trend of the general level of prices occurred in the last century. From 1820 to about 1850 the general trend of prices was downwards, a fall of about 25 per cent. in the general level being registered. During this period it is probable that agricultural produce suffered less than some raw materials of industry, although prices of corn fell very heavily in certain years. From 1850 to 1870 the trend of the level of prices was upwards and the general rise was about 25 per cent. on the basis of the years immediately preceding 1850. But potatoes did not share this increase, and wheat did not share to the full extent, showing a rise of only about 6 per cent. On the other hand, mutton and wool, butter and beef showed much more than the average rise. Yet, while prices were falling between 1875 and 1896, wool showed a decline of 50 per cent. when the general decline was 40 per cent., while butter, beef and mutton showed less than the average fall. Wheat again showed a fall greater than the average, and when general prices rose again after 1896 wheat showed a smaller rise than that in the general level. Prices of barley and oats kept fairly near to the general level during the last century, but those of wheat suffered for 50 years before the War. The following comparison is interesting.

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[1] But a good textbook like Layton's *Introduction to the Study of Prices* or Irving Fisher's *Purchasing Power of Money* should be consulted.

CHANGES IN PRICES BETWEEN—

	1846–50 and 1871–75	1871–75 and 1894–98	1894–98 and 1906–10
	Per cent.	Per cent.	Per cent.
General Level of Prices	*+ 25*	*− 40*	*+ 25*
Wheat	+ 6	− 51	+ 17
Barley	+ 25	− 39	+ 4
Oats	+ 24	− 38	+ 11
Mutton	+ 34	− 25	+ 16
Wool	+ 70	− 50	+ 16
Beef	+ 55	− 29	+ 16
Butter	+ 40	− 25	+ 17
Potatoes	+ 1	− 39	+ 4

The distinguishing feature of the general rise in prices from 1896 onwards was that on the whole agricultural produce, especially such as can be produced in Great Britain, took only a very small share in it. Wheat did very well in the period, but it started from a very low level in the years 1894–98, and its parity of value was still very low. On the other hand, potatoes again showed a poor correspondence with the general price movement.

These two commodities show somewhat similar relations to the general price level under totally different circumstances. The bulk of the supply of potatoes was always produced in our own country, but the purchasing power of potatoes was falling from 1850 onwards, probably as a result of improving methods and increasing yields on our own farms. The purchasing power of wheat was also falling, even when wheat-consuming populations were increasing in numbers. This was partly the result of decreasing costs of production in the main exporting area; but also partly because the increasing populations did not have an altogether proportionate effect on demand. With falling prices after 1874 the real wages of manual workers were rising, and the increased purchasing power of their cash wages enabled them to increase their consumption of meat and other foods with some resulting restriction of the demand for bread in relation to the number of the population. The result is shown in the high purchasing power of beef and mutton from 1850 onwards.

Although the general level of prices was changing from time to time and the price of every commodity was affected by monetary conditions, the price of each was affected in varying degrees, because of the special causes operating on the particular demand or supply. And the price of every commodity in relation to the general price level, i.e., its purchasing power, together with certain influences operating on cost of production, regulated the production in this country. There is now no opportunity of dealing with changes in costs of production of different commodities, but the relation between prices or purchasing power and production are indicated by the well-known decline in acreage and production of wheat and the equally well-known maintenance and even increase of the cattle population.[1]

The price movements during the War period are within common experience, but an illustration of the dependence of prices on currency and trade may be useful.

COMPARISON OF PRODUCTION OF CERTAIN GOODS IN CERTAIN COUNTRIES, 1913–1919.

		1910–14 = 100.
Wheat		99·3
Barley		104
Oats		97
Maize		105
Wool		92
Sugar		96
Coal,	1913 = 100	79·4
Pig Iron	,,	75
Steel	,,	80

During this period the changes in currency and prices in the United Kingdom were as follows :—

1913 = 100.	August, 1919
Currency of all kinds	244
Wholesale Prices	257
Retail Prices of Food	217 [2]

Thus with a slight deficiency in production and trade as indicated by the figures for production, wholesale prices show an increase slightly greater than that in currency. It is not suggested that no other factors were involved or that the correspondence in movement will inevitably be so close, and these figures are merely illustrative.

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[1] See " Memorandum on the Decline of British Agriculture between 1874 and 1896 " and pp. 21–39, *Stabilisation Report.*

[2] See *Statements of Production, Price Movements and Currency Expansion in Certain Countries.* Cmd. 434, 1919.

But again individual farm products were affected in different degrees by changes in prices. Making a comparison by the Sauerbeck Index Numbers as before, the following figures indicate the approximate changes, including the War and post-War movements.

	Changes between 1911–13 and 1923–24 Per cent.
General Price Level	+ *66*
English Wheat	+ 39
Barley	+ 41
Oats	+ 37
Beef	+ 54
Mutton	+ 61
Butter	+ 60
Wool	+ 41
Potatoes	+ 70

Thus comparing the two post-War years with the earlier period all the cereals are losing some purchasing power, and prices of both barley and oats are showing less than their usual correspondence with movements in general prices. On the other hand, prices of the meats were still keeping near their usual correspondence with general movements.

Changes in prices which are common to all commodities, or, in other words, changes in the purchasing power of money, have general effects which are important. A rise in general price level or a fall in the purchasing power of money gives a financial advantage to debtors and puts creditors at a disadvantage. An increase in the purchasing power of money or a fall in the general price-level gives a financial advantage to creditors and puts debtors at a disadvantage. In the one case debtors pay less in values, and in the other they pay more in values than they expected to pay when the purchase or the contract was made. This applies not only to debtors in the ordinary sense, but to all those who are concerned in long-term contracts. Thus a mortgagee suffers from a rise in prices which diminishes the values (of goods and/or services) which will be commanded by the fixed payment in money under the mortgage. While the mortgagor gains relative advantages with the rising price level, he will suffer when the level is falling. Hence the financial difficulties in which many new owner-occupiers with heavily mortaged farms found themselves after the "slump" of 1921. Similarly in long term contracts for rent, whether the long term is determined by actual contract as by the "long lease" or by custom as in the case of the "lease from year to year," the landowner will suffer from a rise in general prices when rents have been fixed on the basis of the lower price level. The disadvantage thus suffered may continue for some years either by the terms of the contract or the force of custom. On the other hand, any advantage which may be gained when general prices fall after rents have been fixed on the basis of a higher price level tends, because of the force of custom and farmers' opinion, to be of temporary duration only.[1]

But as prices have a regulatory effect on production, a rise in the general price-level tends to stimulate production, while a fall in the price-level tends to restrict production. This is not only because of the "lag" between incurring of costs and the receipt of prices but also because of the effect of rising or falling prices on the minds of producers. A rising price-level tends to create optimism and enterprise, while a falling one tends to create pessimism and caution even if it does not give rise to fear and cause the cessation of constructive activity. Agriculture is as much subject to these influences as any other industry. But general production can increase with rising prices only when labour and raw materials are available, and during the War, for instance, supplies of labour and raw materials for ordinary trade production were limited. And at all times of rising or falling prices the production of each commodity will be subject to the particular influences affecting its demand or its supply. A fairly stable level of prices may be maintainable by control of the issue of currency and credit, at least on an international system,[2] but the steadiest price level will not suffice for the equal maintenance or development of the many branches of the composite group of industries which is described as "agriculture." A stable price-level is desirable, but within a stable price-level any regulation or encouragement of a particular line of production will have to be pursued by methods adapted to the conditions of demand and supply of the individual product.

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[1] The "economic lag" in farming, and some of the effects of rising and falling prices have been ably illustrated by Mr. C. Dampier Whetham (This *Journal*, "The Economics of Agriculture, etc.," Vol. 85, 1924). But the method of estimating the lag by "costing" tends to exaggerate the effect of a change in prices when general prices are falling, because the actual transaction in cash tends to occur later in time than the making of the book-entry. It also tends to diminish the actual advantage offered by the "lag" when general prices are rising for the same reason. The length of the "lag" and the relative advantage or disadvantage of a rising or falling price-level to farmers on different types of farms is better measured by the relation of annual "turnover" to capital and by profits rather than by the theoretical method of cost accounting. In the extreme case, the Welsh dairy farm, where the theoretical "lag" would be about six months, may have a much shorter actual "lag." The farmer sometimes pays wages only once a year, and at most twice. Rent may be paid half-yearly, but even so will be paid two months after it is theoretically due. Purchases of feeding stuffs may be small, and may be paid for three months or more after purchase and use. Indeed, very considerable receipts may be obtained before any money is expended, except that of the original investment in stock and equipment. Where the "cost" of feeding stuffs or labour is entered weekly or monthly the "lag" is to some extent fictitious unless the book-entry corresponds to an actual cash transaction of the same date.

[2] For the exposition of methods of stabilising prices, see *Monetary Reconstruction*, by R. G. Hawtrey; and for discussion, *A Tract on Monetary Reform*, by J. M. Keynes.

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SILAGE FEEDING EXPERIMENTS.

The great interest taken in silage at the present time renders it desirable that more information should be available with regard to its value as a foodstuff for cattle. In order to investigate this subject further, experiments were conducted on farms in East Suffolk during the years 1924 and 1925, a grant being made by the Research Committee of the Royal Agricultural Society to the East Suffolk Education Committee for this purpose.

The experiment was the outcome of a suggestion by Sir Daniel Hall who, in his paper read before the Farmers' Club in London, in March, 1923, pointed out that a number of feeding experiments have shown that cows do specially well on silage, but that further investigation was needed designed on rather different lines. "Silage," said Sir Daniel, "is deficient in carbo-hydrates; we want, therefore, to be told the amount of silage and some cheap carbo-hydrate like barley meal, maize, or molasses, which will constitute the true equivalent to a stone of mangolds in a ration."

Sir Daniel Hall subsequently pointed out that mangolds, in the main, supply carbo-hydrates, whilst silage is a more distinctly protein food. He suggested that a ration should be tried in which the deficiency in carbo-hydrates of the silage was balanced by the addition of a carbo-hydrate food, such as barley, oats or molasses, whilst a reduction might be effected in the cake, because of the proteins available in the silage.

The first experiment was conducted in the early months of 1924 on two farms (Searson's and Blofield Hall) occupied by Messrs. C. C. Smith & Sons. The cows were selected from the herds on these two farms, and were placed at the disposal of the Committee free of charge by Messrs. Smith, who also provided all cattle food necessary.

The food given to the cows and the milk produced were weighed by Mr. Eric Rea.

Mr. E. T. Halnan, of the School of Agriculture, Cambridge, kindly assisted in drawing up the feeding ration, taking into consideration the then recent work upon the composition of silage at Cambridge by Messrs. Amos and Woodman.

		Starch Equivalent	Digestible Protein
SILAGE RATION for 1,200 lb. cow giving 1 gallon of milk daily:			
32 lb. Silage		3·84	·80
10 „ Straw Chaff		1·70	·07
14 „ Mangolds	*i.e.* Carbo-hydrate foods (to balance the deficiency of Silage in Carbohydrates)	·98	·07
4 „ Crushed Oats		2·80	·32
		9·32	1·26
ROOT RATION for comparison:			
56 lb. Mangolds		3·92	·28
7 „ Clover Hay		2·24	·35
10 „ Straw Chaff		1·70	·07
1½ „ Earthnut Cake (decorticated)		1·10	·615
		8·96	1·315

The earthnut cake was used to balance the deficiency of roots in protein. Clover hay was used, as no meadow hay was available.

The figures taken for the composition of silage were, in Mr. Halnan's opinion, more reliable than the standard analyses given elsewhere. They assume a considerably higher content of digestible protein (2·5 per cent.) for silage than has often been taken. The result of this was that a smaller quantity of silage was assumed to contain the necessary digestible protein than would have been the case had certain other figures been used.

Professor T. B. Wood [1] gives green fruity silage made from vetches and oats as containing an average of 3·4 per cent. total protein, 2·2 per cent. of crude digestible protein, and 1·1 per cent. of pure digestible protein.

The Report of the Departmental Committee on Rationing of Dairy Cows, published in 1925 by the Ministry of Agriculture, also gives these figures, and in addition a figure called protein equivalent, which is an average of the digestible true protein and the digestible crude protein. This figure is intended to be used as the protein standard in working out rations for cows. In the case of green fruity silage made from vetches and oats, the protein equivalent is given as 1·6 per cent.

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[1] *Rations for Live Stock.* Ministry of Agriculture Miscellaneous Publications, No. 32. Fourth Edition.

None of these figures were available at the time the experiment was started.

An average sample of the silage at both farms was taken and analysed by Mr. A. J. Codling, of the School of Agriculture, Cambridge. The following result was obtained :—

	No. 1 Searson's Farm	No. 2 Blofield Hall
Water	71·00	77·1
Fat	1·26	1·07
Albuminoids, *i.e.* Total Crude Proteins	3·32	3·07
Carbo-hydrates	11·64	7·34
Fibre	10·21	9·31
Ash	2·57	2·11
	100·00	100·00

In this connection it should be noted that Mr. V. C. Fishwick, in an account of feeding trials with silage conducted at the South-Eastern Agricultural College, Wye, Kent,[1] stated that the composition of oat and tare silage was found to vary considerably, not only from year to year, but in samples taken at different heights in the silo. This information was not available at the time the experiment was started.

The silage was of good average quality, but not quite up to the standard of green fruity silage. It was made from an autumn-sown crop, the mixture sown consisting of :—

1 bushel of Winter Oats.
1 „ „ „ Vetches.
1 „ „ „ Beans.

The proportion of beans in the silage was not very large. The crop was put into a wooden stave silo when the oats were in the milky stage, and the vetches had small seeds in the pods. The green material was chaffed at the time of filling the silo, but sometimes it was found that the stems of the oats were not well cut up, and when this was the case the cows were inclined to reject them.

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[1] *Journal, Ministry of Agriculture,* April, 1924.

For each additional gallon of milk after the first, 4½ lb. per gallon of a mixture of equal parts of dried grains, bean meal and crushed oats was fed. The total daily weight of concentrated food (or the additional production ration) was kept the same for both lots of cows.

As will be seen from the above, the object of the experiment, stated briefly, was to compare a ration based mainly upon silage with one chiefly based upon roots. In both cases an attempt was made so to adjust the rations as to contain approximately equal quantities of digestible protein and to have an approximately equal starch equivalent.

Preliminary work connected with the experiment commenced at Searson's Farm, Trimley, on January 1, 1924. Twelve cows were selected, and divided into two lots of 6, yielding approximately the same amount of milk daily. The cows varied somewhat in size, but the two lots were about equal in this respect. The selected cows consisted of 8 Friesian and 4 cross-breds, and most of them had had 3 or 4 calves. They were housed in a large modern cow-house, well lighted and ventilated, and they remained in the cow-house at night, but were turned out on to a bare pasture, somewhat exposed to the wind, from 9 a.m. to 11 a.m. They were fed three times daily, *i.e.* at 5.30 a.m., 11 a.m. and 4 p.m. They were watered at 9 a.m. and 3.30 p.m., and milked at 5.30 a.m. and 2 p.m.

It was found that the quantity of chaff in the ration was more than the cows could eat; this was in consequence reduced to 7 lb. daily. The revised rations fed from the commencement to the end of the actual experiment, for maintenance and 1 gallon of milk, taking the high figure for digestible protein in the silage, were :—

	Starch Equivalent	Digestible Protein
SILAGE RATION :		
32 lb. Silage	3·84	·80
7 ,, Straw Chaff	1·19	·05
14 ,, Mangolds	·98	·07
4 ,, Crushed Oats	2·80	·32
	8·81	1·24
ROOT RATION :		
56 lb. Mangolds	3·92	·28
7 ,, Clover Hay	2·24	·35
7 ,, Straw Chaff	1·19	·05
1½ ,, Earthnut Cake (decorticated	1·10	·615
	8·45	1·295

GENERAL OBSERVATIONS MADE DURING THE EXPERIMENTAL PERIOD.

After the preliminary period, the actual experiment commenced on January 13. During the first week the cows fed upon silage "nosed out" the mangolds from their rations first; later they appeared to take the food better and there was no waste. In the third week of the test it was noticed that the cows of both lots cleared up the food eagerly and appeared to desire more, and commenced to eat their bedding. In the fourth week (February 3 to 10) the weather turned suddenly colder and a sharp fall of the milk yield followed.

At the end of the fourth week the rations were changed over, the cows formerly receiving the roots ration being given the silage ration, and *vice versa.* No trouble was experienced owing to the sudden change of food; the weather was cold and the cows hungry. In view of this it was decided to increase the maintenance ration of both lots by 5 lb. of clover hay per cow per day. This was eaten eagerly and appeared to make the animals more satisfied. Owing to the fall of milk yield the ration of concentrated foods for production was reduced with both lots to 36 lb. for the 6 cows for the second month of the experiment.

The weather continued very cold during most of February, but during the last week of the experiment it improved, when the cows of both lots rejected a little chaff, whilst the silage cows also rejected a little silage where it was not very completely chaffed. The most severe spell of weather was between February 7 and March 3, and this had a very adverse effect upon the milk yield. All through the experiment it was noted that cold winds caused a sudden temporary drop in milk, while corresponding recoveries were made on mild days.

CONDITION OF COWS BEFORE AND AFTER EXPERIMENT.

At the end of the experiment none of the cows had appreciably altered in condition, all having maintained their flesh fairly well.

BUTTER FAT TESTS.

The milk was sampled twice during the experiment—once in each period—and tested at the School of Agriculture, Cambridge. The results, giving the average of the evening and morning tests, are given in Table I.

Summary of Results of the Experiment.

ROOTS RATION.

		Milk in lb.
LOT I.	January 13 to February 10 (4 weeks)	4,553
LOT II.	February 17 to March 16 (4 weeks)	4,157
	Total Roots Ration (8 weeks)	8,710

SILAGE RATION.

LOT II.	January 13 to February 10 (4 weeks)	4,334
LOT I.	February 17 to March 16 (4 weeks)	3,927
	Total Silage Ration (8 weeks)	8,261

Advantage in favour of Roots Ration, *i.e.* 5·1 per cent., 449 lb.

Professor T. B. Wood was consulted as to whether this difference could be regarded as significant, and he has also obtained Mr. Udney Yule's opinion on the question. He writes as follows:—

"I find that the probable error of the weekly averages of the two root periods is 1·27 per cent. and of the two silage periods 1·34 per cent. The probable error of the difference is therefore 1·8 per cent. The difference between the two is 5·1 per cent., which is nearly three times its probable error. This means that the chances are at least 30 to 1 that the difference you record is really significant.

"In working out the probable errors, no account was taken of the fact that a progressive fall in the milk yield was to be expected and actually took place. If this were allowed for the probable error would come considerably smaller, and this would increase the chances that your result is really significant to something like 50 to 1 instead of 30 to 1.

"Mr. Yule and I have discussed the figures together, and we are both of opinion that the difference you record is certainly significant."

The writer also discussed the results with Mr. James Mackintosh, of the National Institute of Research in Dairying, and he wrote as follows:—

"Two points strike me in connection with these experiments. The first is that you assumed rather too high a percentage of digestible albuminoids in the silage. Had you taken a digestible percentage of 1·5 per cent. or even 2·0 per cent., probably the results would have been less in favour of the roots. The second point is that the root ration contains clover hay, whereas the silage ration does not. This may have contributed to the better results obtained from the root ration."

CONCLUSIONS.

I. The experiment confirms the results of former tests conducted by the writer and others, in showing the complete suitability of silage for milk production.

II. It will be remembered that the principal object of the experiment was to compare a ration based mainly upon silage with one chiefly based on roots. In both cases an attempt was made so to adjust the rations as to contain approximately equal quantities of digestible protein and to have approximate equal starch equivalent. The results obtained show that roughly 5 per cent. more milk was given by the cows upon the roots ration, and this is regarded by Professor Wood and Mr. Udney Yule as a significant difference. Evidently, therefore, the root ration, as actually fed, must be regarded as slightly superior to the silage ration for milk production.

The composition of silage undoubtedly varies very much, and the original figure taken for digestible protein (2·5 per cent.) seems to have been much too high for the actual silage fed in this experiment. If this surmise is correct, a larger quantity of silage would have been necessary to equalise the rations. This view is confirmed by the figures previously referred to (*see* p. 113).

III. The combination of silage with carbo-hydrate foods—crushed oats and a small quantity of mangolds—proved to be a sound method of feeding. This raises the important question of the extent to which, by using a fairly heavy ration of silage (to reduce the quantity of concentrated foods rich in albuminoids, fed) with a fairly heavy ration of roots (which are frequently the cheapest carbo-hydrate food available), it might be possible to devise a ration which would involve the feeding of very little concentrated foods for the first two gallons of milk. This point seems of great importance in view of the urgent necessity of feeding dairy cows in the cheapest possible way and at the same time giving them an ample supply of the necessary food materials required for the manufacture of milk.

IV. The evident hunger of the cows during periods of cold weather, although they were receiving a ration which is generally accepted as sufficient for maintenance and production, seems to indicate that the maintenance ration should be increased in bad weather.

TABLE I.

Searson's Farm, Trimley.

Lot I.

Name of Cow	Roots	Silage
	Total Yield for First Period in lb. of Milk	Total Yield for Second Period in lb. of Milk
Searson's Primula	888¼	701¼
Bessie	905¼	806¾
Rose	760½	642½
Princess	749½	674¼
Spot	665¾	596
Ongar Lily	584	506¼
Total	4,553¼	3,927
Average percentage of butter fat, evening and morning on date of sampling	3·35	3·94

Lot II.

Name of Cow	Silage	Roots
	Total Yield for First Period in lb. of Milk	Total Yield for Second Period in lb. of Milk
Horney	594	536½
Minerva	861¾	855¼
Dindy	661¼	636½
Ella	503¾	454¾
Prorrock Primula	1,187¼	1,165¼
Helner	526¾	509
Total	4,334¾	4,157¼
Average percentage of butter fat, evening and morning on date of sampling	3·66	3·69

The second experiment, conducted at Blofield Hall, Trimley, was a duplicate of that at Searson's Farm. It was commenced on January 28, 1924. All the cows were cross-bred non-pedigree animals of Lincoln Red Shorthorn type. They were very uniform in character. Twelve cows were taken and were divided into two lots, each lot consisting of 4 cows and 2 heifers. They were not so advanced in their lactation periods as those at Searson's, three having calved within a month previous to the commencement of the experiment.

The farm at Blofield lies in a sheltered hollow a few hundred yards from Searson's Farm, and it was possible for Mr. Eric Rea to feed the cows and weigh the milk at both farms, owing to slightly different times of feeding and milking.

Exactly the same rations were fed as at Searson's Farm, with the exception that the silage came from a different silo, until towards the end of the experiment. Additional concentrated foods were fed as at Searson's Farm, *i.e.* 4½ lb. of a mixture of equal parts of dried grains, crushed oats and bean meals, per gallon of milk over 1 gallon. Each lot of 6 cows received 60 lb. daily of this mixture in the first part of the experiment.

Unfortunately the milk yield of several cows of Lot I (receiving roots) was adversely affected during the first weeks of the trial by illness (chills, and in one case impaction of the rumen) and an accident. On February 24 the foods were changed over, Lot I now being given the silage ration and Lot II being given the roots ration. The change was made suddenly, but the cows took to the food, the weather being very cold.

On February 24 an extra maintenance ration of 5 lb. of clover hay was added to each ration, as at Searson's Farm, although the cows at Blofield did not show the same symptoms of underfeeding as at Searson's. At the same time the allowance of extra concentrated foods was reduced by 1 lb. per head owing to fall in yield of milk.

On March 7 there was a sudden depreciation in quality of the silage at Blofield. It was sour, and the cows rejected much of it. This was owing to reaching the end of last season's supply and coming on to an older sample placed in the silo in 1922, the bad quality silage being at the junction of the two lots. The following day it was decided to bring silage from Searson's.

The unfortunate series of accidents which affected the cows in Lot I made the results from that lot quite unreliable. No fewer than five of them were affected to such an extent at various periods of the experiment, that portions of their records had to be disregarded. They were affected both when on roots and on silage. Lot II were strangely immune, but owing to the fact that their lactation became more advanced, and also that during the second periods of the experiment they received an additional 5 lb. of clover hay for maintenance, but 1 lb. less concentrated food daily, it is difficult to deduce any very definite conclusions from the results, which are given in Table II.

TABLE II.—1924.

Blofield Hall, Trimley.

LOT I. Results unreliable owing to illness of cows.

LOT II.

Name of Cow	SILAGE	ROOTS
	Total Yield for First Period of 4 weeks in lb. of Milk	Total Yield for Second Period of 4 weeks in lb. of Milk
	Jan. 27–Feb. 24	Mar. 2–Mar. 30
Molly	1,072¾	1,105
Hilda	695½	720
Jessie	1,206¼	1,250¾
Ivy	493½	486½
Rose	1,220	1,278¼
Peggy	816¼	830¼
Total	5,504¼	5,670¾
Average percentage of butter fat, evening and morning on date of sampling	3·83	3·78

During the first three months of 1925 a further experiment was conducted with a view to ascertaining whether, by using considerable quantities of both roots and silage, a ration could be drafted which would obviate the necessity of using much concentrated foods for the first 1½ gallons of milk. It was considered that if such a ration were found successful, it would quite appreciably reduce the quantity of concentrated foods necessary, and under normal circumstances would also reduce the cost of milk production.

In this case the experiment was conducted on the farm of Mr. H. G. Smith-Rowse, of Nettlestead Chase, Ipswich, Mr. G. A. M. Reed acting as local supervisor. Mr. Smith-Rowse wished the cows fed upon roots to receive a generous allowance, and to meet his views the following was decided upon as a "Roots" ration :—

"ROOTS" RATION FOR MAINTENANCE AND 1½ GALLONS OF MILK.

	Starch Equivalent	Digestible Protein
80 lb. Mangolds	5·6	·40
10 „ Lucerne Hay	2·5	·70
1 „ Decorticated Cotton Meal	·73	·41
1 „ Beans	·66	·19
1 „ Oats	·60	·08
	10·09	1·78

The silage and roots ration for maintenance and 1½ gallons of milk was as follows :—

	Starch Equivalent	Digestible Protein
21 lb. Mangolds	1·47	·10
50 „ Silage	6·00	·74
7 „ Lucerne Hay	1·75	·49
1 „ Decorticated Cotton Meal	·73	·41
	9·95	1·74

As far as could be arranged, the two rations were practically equal in composition. The silage ration, including as it did some mangolds, provided the necessary carbo-hydrates and also rendered necessary the inclusion of very little concentrated food. A sample of the silage was analysed at the School of Agriculture, Cambridge, with the following results :—

	Per cent.
Moisture	74·00
Oil (ether extract)	2·07
Albuminoids (total crude protein)	4·43
Carbo-hydrates	9·40
Fibre	8·23
Ash	1·87
	100·00

The mixture sown from which the silage was made was :—

1	bushel	Winter Beans.
1½	„	Tares.
½	„	Winter Oats.

The total composition of the silage was very similar to that of the average sample given by Mr. James Mackintosh.[1] It was, therefore, decided to take the digestible composition also from Mr. Mackintosh's tables. A percentage of digestible protein of 1½ per cent., and a starch equivalent of 12 per cent. was, therefore, assumed.

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[1] *The Feeding of Dairy Cows.* National Institute for Research in Dairying.

The contrast between the rations was :—

59 lb. Roots (mangolds)		
3 lb. Lucerne Hay	versus	50 lb. silage.
1 lb. Bean Meal		(47½) „ „
1 lb. Crushed Oats		

As Lot I only consumed on an average 45 lb. silage per day during the second period, the real contrast is between the roots, hay and concentrated foods given above, and 47½ lb. of silage, not 50 lb.

For each additional gallon of milk after the first 1½ gallons, 3½ lb. per gallon of mixture of 2 lb. bean meal and 1½ lb. crushed oats was fed. The total weight of additional concentrated food (*i.e.* the additional production ration) was the same for both lots of cows.

Preliminary work connected with the experiment commenced on January 9, 1925. Twelve cows were selected and divided into two lots of 6, yielding approximately the same amount of milk daily. The cows in both lots were of an average size. The twelve cows selected consisted of 9 pedigree and 3 non-pedigree Dairy Shorthorns. Seven of the cows had had 4 or 5 calves, the remaining 5 were young cows having had 1 or 2 calves.

After the preliminary period, the actual experiment commenced on January 18. By this time the cows had taken to the rations quite well and cleared up the food nicely, except for a few hard stalks of the Lucerne hay. The weather was quite favourable during the first period of the experiment.

At the end of the fourth week the rations were gradually changed over, the cows formerly receiving silage being given roots, and *vice versa.* Some trouble was experienced in changing the ration from roots to silage. Some of the cows would not take to the silage for several days, and there was a heavy fall in the milk yield of one cow (Duchess) which was not recovered —due probably to stomach trouble. This cow scoured through both periods of the experiment on both roots and silage. The change from silage to roots was taken quite well, and there was no marked fall in the milk yield due to the change of food.

The fall in milk yields was not so heavy as to necessitate adjusting the concentrated food for production at the end of the first period. During the second period some cows of Lot I would not clear up all the silage. Those cows leaving the most silage were those which fell heavily in milk yields. The weather was very severe during the ninth week, March 8 to 15. The yields, however, were affected but very slightly. The cows seemed quite satisfied, and no extra food was given them.

During the last week of the experiment the weather improved, and some of the cows rejected a little hay and more silage. The silage was a little stronger in smell during the last week, probably owing to the fact that it was coming from near the bottom of the silo.

At the end of the experiment none of the cows had apparently altered in condition, having maintained their flesh well.

The silage was of average quality, the proportion of beans in it being very small. In some parts of the field the tares did not do so well, and there were too many oats in the silage. The crop was put into a steel silo when the oats were in the milky stage and the tares had small seeds in the pods. The green material was chaffed at the time of filling the silo, and the stems of the oats were not well cut up. This may partly account for the cows not eating the silage so well.

The Lucerne hay was somewhat stalky owing to the fact that the weather during early June, 1924, was very wet, and cutting had to be delayed until the weather improved.

The mangolds were Red Intermediates, and were cut up and mixed with the silage in the silage ration, and in the root ration three parts were cut, and the other part fed whole.

During the second period of the experiment, an average of 5·3 lb. of silage was rejected by the cows of Lot I, the quantity varying from 13·3 lb. per day in the case of Duchess, and 11·4 lb. in the case of Red Nell, to none in the case of Bounce. The silage rejected by each cow was weighed daily.

It is worthy of note that the food offered to Red Nell daily, including concentrates, contained about 27 lb. of dry matter. Of this she rejected silage containing about 3 lb. of dry matter, so that the food she actually consumed daily contained about 24 lb. of dry matter.

Results of the Experiment.

ROOTS RATION.

	Milk in lb.
LOT I. January 18 to February 15 (4 weeks) . .	4,814½
LOT II. February 22 to March 22 (4 weeks) . .	4,482¾
Total Roots Ration (8 weeks)	9,297¼

SILAGE RATION.

LOT II. January 18 to February 15 (4 weeks) . .	4,868¼
LOT I. February 22 to March 22 (4 weeks) . .	3,982
Total Silage Ration (8 weeks)	8,850¼

Advantage in favour of Roots, *i.e.* 4·8 per cent., 447 lb.

As previously noted, one cow (Duchess) was inclined to scour throughout the whole experiment. On changing from roots to silage her drop in yield of milk was very heavy—60 lb. in one week. This cow also rejected a considerable quantity of her silage—an average of 13·3 lb. daily. If this cow be eliminated, we get the following results :—

ROOTS RATION.

		Milk in lb.	
LOT I.	January 18 to February 15 (4 weeks)	3,735¾	5 cows.
LOT II.	February 22 to March 22 (4 weeks)	4,482½	6 ,,
Total Roots Ration (8 weeks)		8,218¼	

SILAGE AND ROOTS RATION.

LOT II.	January 18 to February 15 (4 weeks)	4,868½	6 cows.
LOT I.	February 22 to March 22 (4 weeks)	3,199½	5 ,,
Total Silage Ration (8 weeks)		8,068	

Advantage in favour of Roots, *i.e.* 1·8 per cent., 150 lb.

If Red Nell, the other cow in Lot I which rejected considerable quantities of silage, be left out, the result is still further affected :—

ROOTS RATION.

		Milk in lb.	
LOT I.	January 18 to February 15 (4 weeks)	2,855	4 cows.
LOT II.	February 22 to March 22 (4 weeks)	4,482½	6 ,,
Total		7,337½	

SILAGE AND ROOTS RATION.

LOT II.	January 18 to February 15 (4 weeks)	4,868½	6 cows.
LOT I.	February 22 to March 22 (4 weeks)	2,471½	4 ,,
Total		7,340	

It appears reasonable to conclude from this that in the case of the ten cows which liked the silage and ate it well, the roots and the silage-plus-roots rations were practically equal in value for milk production, but that in the case of the two cows which did not eat the silage well, the roots ration was decidedly superior.

TABLE III.

Nettlestead Chase, 1925.

Yields of Milk of Cows under Experiment.

LOT I.

Name of Cow	ROOTS	SILAGE AND ROOTS
	Total Yield for First Period of 4 Weeks in lb. of Milk	Total Yield for Second Period of 4 Weeks in lb. of Milk
Duchess	1,078¾	782¾
Bounce.	885¼	777½
Red Nell	880¾	727¾
N. Jewell	678	599¾
N. Heather	788¾	676½
N. Elegance	503	417¾
Total . . .	4,814½	3,982

LOT II.

Name of Cow	Total Yield for First Period of 4 Weeks in lb. of Milk	Total Yield for Second Period of 4 Weeks in lb. of Milk
Ivy	1,047¾	913¾
Myrtle	1,148¾	1,048¾
Princess	819¼	772¼
Melody	629½	601½
N. Flower	497	418¾
P. Ruby	726	727¾
Total . . .	4,868¼	4,482¾

Cost of the Two Rations.

ROOTS RATION.

		Cost—pence.
80 lb.	Mangolds at 15*s.* per ton	6·40
10 lb.	Lucerne Hay at £4 per ton.	4·30
1 lb.	Decorticated Cotton Seed at £13 10*s.* per ton	1·44
1 lb.	Bean Meal at £12 per ton	1·29
1 lb.	Crushed Oats at £11 per ton	1·18
		14·61

SILAGE AND ROOTS RATION.

	Cost—pence.
21 lb. Mangolds at 15*s.* per ton	1·68
50 lb. Silage at 25*s.* per ton	6·70
7 lb. Lucerne Hay at £4 per ton	3·01
1 lb. Decorticated Cotton Seed Meal at £13 10*s.* per ton	1·44
	12·83

The accuracy of these figures depends largely upon the cost of growing mangolds and silage. Where very large crops of mangolds can be grown, the cost per ton will probably be less than 15*s.* per ton. The cost of growing silage depends amongst other things partly upon the crops obtained, and partly upon the overhead charges, which again depend upon the type of silo, its durability, etc. The price of hay has been taken at an average figure. The price of the concentrated foods has been taken at the prices current in January, 1925. It is evident that at the prices assumed, the roots ration must be regarded as costing about 1¾*d.* per cow per day more than the silage ration.

CONCLUSIONS.

It would appear from the results of this experiment—

(1) That cows which like and greedily eat silage will give practically as much milk upon a silage roots and hay ration as upon a ration of roots and hay to which a little concentrated food is added to make the two rations theoretically equivalent.

(2) That such a silage and roots ration will be cheaper to the extent of nearly 2*d.* per cow daily, if the figures assumed for the cost of roots and of silage are correct.

(3) That certain cows do not eat silage well. It is best to reduce the quantity fed to such cows and to substitute other foods.

GENERAL CONCLUSIONS FROM THE THREE EXPERIMENTS CONDUCTED DURING TWO SEASONS.

(1) That silage is quite a suitable food for most milking cows.

(2) That its deficiency in carbo-hydrates may be made good by feeding it together with either crushed oats or mangolds, or both.

(3) That the considerable variation which occurs in the quality of silage makes it rather difficult to judge how much of it to feed as an equivalent to other foods. It seems probable that average silage as fed in these experiments should not be assumed to contain much more than 1·5 per cent. to 1·6 per cent. of "protein equivalent."

(4) That some cows like silage and thrive upon it. Such

cows will give practically as much milk with silage, roots and hay as upon a ration of roots and hay with a little concentrated food to make the two rations theoretically equivalent. Such a silage and roots ration will be somewhat cheaper to feed as the quantity of concentrated food needed is reduced.

(5) On the other hand, other cows do not relish silage, and such cows should have only a small quantity fed to them, other foods being substituted. If silage is fed in quantity to cows which do not eat it well, their yield of milk may very probably fall off considerably.

(6) That during periods of exceptionally cold weather, the generally accepted maintenance ration should be increased if the cows seem hungry.

In conclusion, I wish to express my indebtedness to all those gentlemen whose names are mentioned in this report, especially to Messrs. Eric Rea and G. A. M. Reed, without whose assistance I should have been unable to conduct this investigation.

I also wish to acknowledge with gratitude the financial help granted by the Royal Agricultural Society of England, without which these experiments would have been impossible.

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CONTEMPORARY AGRICULTURAL LAW.

I.—LEGISLATION.

THE Legislature has added to the law of this land in 1925 what is surely an unprecedented amount of statutes. The volume of Acts of Parliament passed in 1925 exceeds in size any volume of recent years. Much of this new legislation consists of the bulky statutes dealing with the new Law of Property in land, the powers and duties of trustees, the administration of estates of deceased persons and the registration of title and of land charges which do not especially affect agricultural interests. There are also lengthy consolidating Acts bringing together into one statute various previous Acts of Parliament. Of this kind are the Housing Act, 1925, the Town Planning Act, 1925, the Supreme Court of Judicature (Consolidation) Act, 1925, and the Workmen's Compensation Act, 1925. These do not substantially alter the previously existing law.

It is, however, necessary to notice some enactments which more nearly affect agricultural interests. Amongst them are the provisions of the Settled Land Act, 1925 (15 Geo. 5, c. 18), which enlarges the list of improvements which may be carried out by means of capital money in the hands of trustees of settled land. The list of authorized improvements is contained in the Third Schedule to the Act, which adds to those already allowed (amongst other things) bridges, the provision of small dwellings, residential houses for land or mineral agents, managers, clerks, bailiffs, woodmen, gamekeepers and other persons employed on the settled land, or in connection with the management or development thereof, any offices, workshops and other buildings of a permanent nature required in connection with the management or development of the settled land or any part thereof, the erection of gasworks, electric light or power works, the restoration or reconstruction of buildings damaged or destroyed by dry-rot, structural additions to or alterations in buildings reasonably required whether the buildings are intended to be let or not or are already let, boring for water and other preliminary work in connection therewith. In the case of most of these improvements the trustees of the settlement or the Court *may*, but need not, require the capital expended to be replaced out of income by not more than fifty half-yearly instalments. There are also certain other improvements such as heating, hydraulic or electric power apparatus for buildings, steam rollers, traction engines, motor lorries and movable machinery for farming and other purposes on which capital money may be expended, but provision for repayment by instalments out of income is in these cases necessary.

The Importation of Pedigree Animals Act, 1925 (15 & 16 Geo. 5, c. 30), should be noticed, which empowers the Minister of Agriculture and Fisheries to make orders for allowing, subject to conditions prescribed by any such order, any cattle, sheep, goats or swine brought from any part of His Majesty's dominions which are shown to his satisfaction to be there registered as pedigree stock in a herd or flock book recognized by him, after consultation with the Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland, to be landed in Great Britain without being subject to the provisions of Part I of the Third Schedule to the Diseases of Animals Act, 1894 (which relates to slaughter at the port of landing), but subject to the provisions of Part II of that Schedule (which relate to quarantine). No order is, however, to be made except with respect to animals brought from a part of His Majesty's dominions in which pedigree animals brought from this country are allowed to be landed either unconditionally or subject to conditions (including rates of duty) which in the opinion of the Minister are not unduly restrictive.

The Protection of Birds Act, 1925 (15 & 16 Geo. 5, c. 31), makes it an offence to use as a decoy any live bird which is tethered or is secured by means of braces or other similar appliances, or which is blind, maimed or injured, or to use birdlime or any substance of a like nature for the purpose of taking or capturing alive any wild bird.

The Finance Act, 1925 (15 & 16 Geo. 5, c. 36), by Section 6 imposes upon hops imported into this country a customs duty of £4 per cwt., and an equivalent duty on every extract, essence, or other similar preparation made from hops so imported. Section 16 applies rules 6 and 7 of Cases I and II of Schedule D of the Income Tax, 1918 (which provide, in connection with the charge to income tax under that Schedule of the profits or gains of a trade, for the allowance of deductions in respect of the wear and tear of machinery and plant, and in respect of expenses incurred in replacing obsolete machinery or plant), to the profits or gains arising from the occupation of lands, including woodlands, when they are ascertained otherwise than by reference to assessable value (*i.e.* under Schedule B). This provision will enable deductions for wear and tear of machinery and plant, and for replacing obsolete machinery or plant, to be deducted when the occupier of agricultural land or woodlands has elected to be assessed under Schedule D.

The Agricultural Returns Act, 1925 (15 & 16 Geo. 5, c. 39), empowers the Minister of Agriculture and Fisheries to require the occupier of any agricultural land (which includes land used as grazing, meadow, or pasture land or orchard, and any land used wholly or mainly for the purpose of the trade or business of a market-gardener or nurseryman) to make a return in writing of the acreage of the land in cultivation, specifying the acreage of the several crops thereon, and of the live stock on the land, and of the persons employed thereon; but no individual return must be published or disclosed without the authority of the person making it except for the purposes of the preparation and publication of agricultural statistics. Any person refusing or without lawful excuse neglecting to make a return required under the Act, or making a return to his knowledge untrue in any material particular, is liable in the first case to a fine not exceeding £5, and in the second case to a fine not exceeding £10. The section does not apply in any case when the total acreage of the agricultural land occupied by a person does not exceed one acre.

The Allotments Act, 1925 (15 & 16 Geo. 5, c. 61), amends the law relating to allotments under the Small Holdings and Allotments Act, 1908, and the Allotment Act, 1922. By Section 2 it authorises loans by the Public Works Loan Commissioners to approved allotment societies. Section 3 makes it necessary for any local authority preparing a town-planning scheme to consider what provision should be included therein for the reservation of land for allotments. Section 5 empowers the council of a borough or urban district to acquire land for future allotments if there is a reasonable expectation that the land will eventually be required for allotments. Section 7 amends Sub-section 4 of Section 10 of the Allotments Act, 1922, by enabling a tenant whose tenancy is terminated by the termination of the right of occupation of the council who let the land to him, to claim compensation under the Allotments Act, 1922, notwithstanding that it is otherwise agreed in the contract of tenancy, where the rent payable by the tenant exceeds 3*d.* per pole, unless in the case of a tenancy existing at the passing of the Act the council within three months after the passing of the Act gives notice in writing to the tenant that the rent of the land is as from the last preceding date for payment reduced to a rent of 3*d.* per pole or less. By Section 8, where a local authority has purchased land for allotments, it must not sell, use or dispose of the land for any purpose other than use for allotments without the consent of the Minister of Agriculture and Fisheries after consultation with the Minister of Health. Section 12 makes it necessary for the council of every borough or urban district to establish an allotments committee, notwithstanding that the population of the borough or urban district is less than 10,000, if the total number of allotments provided by the council or urban district exceeds the number of 400.

The Diseases of Animals Act, 1925 (15 & 16 Geo. 5, c. 63), is a short Act providing that where, in accordance with any order made by the Minister of Agriculture and Fisheries under Section 19 of the Diseases of Animals Act, 1894, directing the slaughter of cattle in cases of the existence or suspected existence of tuberculosis, compensation is paid out of the local rates for the slaughter of any cattle by a local authority, the local authority shall be entitled to be repaid by the Minister a sum equal to three-fourths of the amount of compensation so paid.

The Summer Time Act, 1925 (15 & 16 Geo. 5, c. 64), provides for the permanent adoption of summer time beginning at 2 a.m. on the day next following the third Saturday in April, or if that day is Easter Day, the day next following the second Saturday in April, and ending at 2 a.m. on the day next following the first Saturday in October.

The Roads Improvement Act, 1925 (15 & 16 Geo. 5, c. 68), contains a variety of provisions for the improvement of roads which need only be noticed shortly. Section 1 empowers the Minister of Transport and any county council or other highway authority to plant trees and lay out grass margins in highways. Section 4 enables the Minister or any county council or other highway authority, for the prevention of danger from obstruction to view, to impose restrictions with respect to any land at or near any corner or bend in a highway, and to require the owner or occupier of the land to alter the height or character of any wall (not being a wall forming part of the structure of a permanent edifice), fence or hedge thereon, or to restrain him from permitting any building, wall, fence or hedge to be erected or planted on the land. Section 5 authorises the prescription of a frontage line for building on either side of any part of a highway. Compensation is provided to be payable to any person whose property is proved to be injuriously affected by the exercise of the powers so given.

The Widows', Orphans' and Old Age Contributory Pensions Act, 1925 (15 & 16 Geo. 5, c. 70), under which and the National Health Insurance Act, 1924, contributions in respect of male agricultural labourers are now 1*s.* 6*d.* a week, payable as to 9*d.* by the employer and 9*d.* by the employee, and in respect of women so employed 1*s.* 1*d.* a week, payable as to 7*d.* by the employer and 6*d.* by the employee, and under which an insured person attaining 65 after the appointed day will become entitled to an old-age pension of 10*s.* a week, need not be further noticed here.

The Public Health Act, 1925 (15 & 16 Geo. 5, c. 71), contains many important provisions in respect of local government, most of which do not particularly affect agricultural interests. It should, however, be noted that Section 23 of this Act gives power to the local authority where any tree, hedge or shrub overhangs any street or footpath so as to obstruct or interfere with the light from any public lamp, or to endanger or obstruct the passage of vehicles or foot-passengers, or to obstruct the view of drivers of vehicles, to serve a notice on the owner of the tree, hedge or shrub or the occupier of the premises on which it is growing, to lop or cut the tree, hedge or shrub within fourteen days, and in default of compliance the local authority may themselves carry out the requisition, and recover the cost of so doing as a civil debt.

The Land Settlement (Facilities) Amendment Act, 1925 (15 & 16 Geo. 5, c. 85), substitutes other provisions for those contained in Section 27 of the Land Settlement (Facilities) Act, 1919, for the recoupment of losses incurred by county councils in connection with the acquisition of land under the Small Holdings and Allotments Act, 1908. Shortly the Act provides for the ascertainment of (*a*) the charges to be met in each half-year by any county council in respect of expenditure properly incurred by them in respect of the acquisition, adaptation, or improvement of or otherwise in relation to their small holdings estate; and (*b*) the net income in each year which will accrue to the council from their small holdings estate. The deficiency so ascertained is treated as a loss by the county council, which is to be recouped to the council by the Minister of Agriculture and Fisheries in respect of each half-year.

The Tithe Act, 1925 (15 & 16 Geo. 5, c. 87), provides that sums payable on or after the "appointed day" in respect of a tithe rent charge in lieu of being computed in manner prescribed by the former Tithe Acts, shall be stabilised and computed on the basis of £105 for every £100 of tithe rent charge. Where the dates on which tithe rent charge is payable are dates other than April 1 and October 1, the dates for payment are to be changed to those days. Any tithe rent charge attached to a benefice is to be vested in Queen Anne's Bounty, who will hold it in trust for the incumbent of the benefice. Under Section 4 there will also be payable to Queen Anne's Bounty an additional sum of £4 10*s.* in respect of every £100 of tithe rent charge to form a sinking fund for the eventual redemption and extinction of the tithe rent charge at the expiration of 85 years. Out of the £109 10*s.* thus received by Queen Anne's Bounty, £4 10*s.* will be carried to the sinking fund, £5 will be paid to the Inland Revenue Commissioners to be applied by them towards payment of the rates which are assessed on the owner of any tithe rent charge vested in Queen Anne's Bounty (the remainder of such rates being defrayed out of the Consolidated Fund), and the balance after deducting any land tax or any other charge to which the tithe rent charge may be subject, and sums due on account of the cost of collection but free of all rates, will be paid to the incumbent or other person entitled to the emoluments of the benefice. In the case of tithe rent charge attached to an ecclesiastical corporation, the sum of £16 is substituted for the sum of £5 payable by Queen Anne's Bounty to the Inland Revenue Commissioners to meet the rates on the tithe rent charge, and 81½ years is substituted for 85 years during which the tithe rent charge is to continue payable and the payments into the sinking fund are to be accumulated. The provisions of the Act as above stated relating to the transfer to vesting in Queen Anne's Bounty, but not the other provisions of the Act, apply not only to tithe rent charge, but also to any rent charge under the Extraordinary Tithe Redemption Act, 1886, any corn rent charge or money payment payable under any local or personal Act or award in lieu of tithe, any rent charge payable under the Tithe Act, 1860, in respect of the tithes on any gated or stinted pasture, any sum or rate payable for each head of cattle or stock turned on land subject to common rights or held or enjoyed in common, and any tithes and other payments in lieu of tithes not being tithe rent charge. Tithe rent charge vested in a lay impropriator is stabilised at £105 for every £100, but will not be payable to Queen Anne's

Bounty and will not carry the additional £4 10*s*. to form a sinking fund. It will also remain subject to the payment of rates as before, but it is provided that on an application for the redemption of any lay tithe rent charge, if the land is agricultural land for the purposes of the Agricultural Rates Act, 1896, the Minister, in ascertaining the compensation for the redemption, shall not, in respect of rates, deduct from the gross annual value a sum in excess of two-thirds of the average amount which became payable by the owner of the tithe rent charge, or any other person on account of any rate to which the Agricultural Rates Act, 1896, applies.

The Rating and Valuation Act, 1925 (15 & 16 Geo. 5, c. 90), can only be dealt with shortly, but is of great importance inasmuch as it fundamentally alters the present system of valuation and assessment of local rates. It is not to come into operation until the "appointed day" to be fixed by the Minister of Health, which is to be April 1, 1927. By Section 1 the council of every county borough and the council of every urban and rural district is to be the rating authority for the borough or district, and the powers hitherto vested in the overseers of the poor of each parish in relation to making, levying and collection of rates are to be exercised by the new rating authority. By Section 2 each rural rating authority in lieu of making a poor rate for each parish will make and levy a general rate for the whole of the district. By Section 16, county boroughs and such other areas as may be constituted by schemes made under the section will be assessment areas, and by Section 17 there will be an assessment committee for every assessment area. In the case of assessment areas other than county boroughs, the assessment committees will consist of persons appointed by rating authorities, boards of guardians and the councils of counties. By Section 18, in every county a county valuation committee must be established for promoting uniformity in the principles and practice of valuation and assisting rating authorities and assessment committees. Section 22 is perhaps the most important section of the Act, as it lays down, by reference to the Second Schedule to the Act, the principles for ascertaining the rateable value of any hereditament. These appear to be not very different to those at present in force. In the case of agricultural land, 5 per cent. is to be deducted from the gross value in the first instance, and also in the case of a hereditament subject to any rate charge or assessment made by any commissioners of sewers or other like authority in respect of any drainage, wall, embankment or other work for the benefit of the hereditament (not being a usual tenant's rate), such further amount as represents the average annual value of that rate charge or assessment, and the gross value as so reduced is referred to as the net annual value. The rateable value of agricultural land will be the net annual value subject to a further deduction of 75 per cent., and this deduction is also to be made in respect of buildings (other than dwelling-houses) occupied together with agricultural land or being or forming part of a market-garden, and in either case used solely in connection with agricultural operations thereon. This is a concession in favour of agriculture, as hitherto only agricultural land and not agricultural buildings has been allowed to be rated on one-fourth of its full value. The Act contains provisions for enabling objections to be made to draft valuation lists, and for appeals from assessment committees to Quarter Sessions. By Section 33, it authorises the employment of professional valuers, and by Section 40 empowers rating authorities to require returns from owners, occupiers and lessees of property. By Section 62 overseers are abolished, and their powers and duties are to be transferred by Order in Council to rating authorities or such other local authorities as may seem expedient.

II.—Decisions of the Courts.

1. *Landlord and Tenant.*—There have been a number of noticeable cases reported under this head during the year 1925. The first case to be noted is *Rex* v. *Powell, ex parte Marquis Camden* (94 L.J.K.B., 433 ; [1925] 1 K.B., 641), in which it was held that the words "arising out of the termination of the tenancy of the holding" in Section 16, Sub-section 1 of the Agricultural Holdings Act, 1923, apply to the whole of the preceding part of this sub-section with the result that the determination of the tenancy is a condition precedent to the right to demand the appointment of an arbitrator to deal with claims under the Act. An arbitrator appointed under the above section by the Minister of Agriculture and Fisheries has no jurisdiction to decide whether the tenancy has been determined or not, and when the question of the termination of the tenancy is disputed, a writ of prohibition will issue to prevent the arbitrator proceeding with the arbitration. *Harrison* v. *Ridgway* (133 L.T., 238 ; 23 L.G.R., 434) was another case under the same section. The defendant had let to the plaintiff a farm on a yearly tenancy from March 25, 1923, and contracted that he would, before the commencement of the tenancy, put all gates, rails and fences and the buildings in reasonable tenantable order and condition or allow the cost of such reparation. The plaintiff brought an action in the County Court claiming damages for the deterioration of his stock by reason of the defendant's breach of this covenant to repair. At the trial objection was taken by the landlord that the dispute ought to have been referred to

arbitration under Section 16 of the Agricultural Holdings Act, 1923, and that the County Court judge had no jurisdiction to hear the action. This objection was upheld by the County Court judge, but on appeal it was held, following the above-mentioned case of *Rex* v. *Powell*, that the question was not subject to arbitration as it did not arise out of the termination of the tenancy.

A similar construction of Section 15 (1) of the Agricultural Holdings (Scotland) Act, 1923, which corresponds with Section 16 of the English Act, was adopted in a Scottish case of *Westwood* v. *Barnett* ([1925] S.C., 624), where it was held that a claim made during the currency of the lease could not, prior to its termination, be referred to arbitration under the Act. So, too, in *Donaldson's Hospital* v. *Esslemont* ([1925] S.C., 199), a similar construction was given to Section 15 (1), and it was held that the claimant's title to compensation, which was disputed on the ground that the tenancy had not terminated, was not one of the matters remitted by the Act to the exclusive jurisdiction of the arbiter.

Macgregor v. *Board of Agriculture for Scotland* ([1925] S.C. 613) was another Scottish case which raised the question as to whether a loss to the tenant caused by the under-valuation of his way-going crop could be included in his claim for compensation for disturbance. Under the lease the landlord took over the way-going crop of grain from the outgoing tenant at fair prices, the quantity of the crop being ascertained, as provided for in the lease, by arbitration. After threshing it was found that the quantity had been underestimated in the arbitration. The outgoing tenant accordingly, under Section 10 of the Agriculture Act, 1920 (now Section 12 of the Agricultural Holdings Act, 1923), claimed as compensation for loss in connection with the sale of the farm produce a sum representing the difference between the price he had received for the grain and the price of the actual quantity threshed. The Court held, on an assumption that the tenant had suffered loss, that he was not entitled to compensation because the loss was not "directly attributable to the quitting of the holding," but had arisen from an error of the arbiters.

In *Montrose* (*Duke*) v. *Hart* ([1925] S.C., 160), also a Scottish case, the question was whether sufficient particulars of claim had been given to satisfy the requirements of Section 16, Subsection 2 of the Act, which provides that a claim will cease to be enforceable after the expiration of two months from the termination of the tenancy unless particulars have been given before the expiration of that period. The landlord wrote reserving a claim in respect of depletion of regular sheep stock which the tenant was under an obligation to maintain. This was followed by a letter stating that only 51 per cent. of sheep received had been handed over, and that the amount to be claimed under this head would be intimated as soon as the precise number of sheep delivered was ascertained. It was held that the second letter gave sufficient particulars as it set out the nature and value of the claim, and the tenant received under it fair notice of the case he had to meet.

In *Rochester & Chatham Joint Sewerage Board* v. *Clinch* (95 L.J.Ch., 49; [1925] Ch., 753), the question that arose was under Section 26 of the Agricultural Holdings Act, 1923, which provides that on the making of a contract for sale of an agricultural holding held on a yearly tenancy, any then current and unexpired notice to determine the tenancy shall be null and void "if the contract for sale is made by the person by whom the notice to quit was given," unless the tenant has by writing agreed that the notice shall be valid. The defendant held his farm under a yearly tenancy. In December, 1914, the owner sold 64 acres of the farm to the plaintiffs, but the defendant continued to pay the whole rent to the owner. The owner died in 1919, and the defendant continued to pay the whole rent to her executors, leaving it to them to pay their proportion to the plaintiffs. On October 10, 1923, the executors and the plaintiffs together signed and served on the defendant a year's notice to quit on October 11, 1924. On October 1, 1924, the executors agreed to sell their portion of the farm to the defendant. It has been held that Section 26 of the Act applies even where the sale is to the tenant himself of part of the farm, and it was contended therefore that the sale by the executors to the tenant in this case rendered the current notice to quit null and void. The Court held that this was not the effect of the contract of sale, for it was made not "by the person by whom the notice to quit was given," but by one only of the parties, viz. the executors, who gave the notice to quit.

In *Falconer* v. *Chisholm's Trustees* ([1925] S.C., 742), a Scottish Court held, in a case where an hotel was let together with a farm, the rents of the hotel and farm being fixed at £40 and £72 per annum respectively, but the property otherwise being treated as one property in the lease, that the house was "let together with land other than the house" within the meaning of proviso (iii) of Sub-section 2 of Section 12 of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, and therefore was excluded from the operation of that Act.

Boswell v. *Crucible Steel Co. of America* (94 L.J.K.B., 383; [1925] 1 K.B., 119) was a case where lessees covenanted to keep the inside of a house, including all "landlord's fixtures," in good repair. It was held that this did not oblige them to replace broken windows, which were not "landlord's fixtures" within the meaning of the covenant, as that expression only applies to chattels which are brought by the landlord to the premises and affixed to the structure but do not form part of it. The windows, it was held, formed part of the structure of the house, and were therefore not repairable by the lessee.

In *Booth* v. *Thomas* ([1926] 1 Ch., 109) a lease contained a covenant by the lessor for quiet enjoyment. The lessor had enclosed a natural stream flowing through part of his property in a culvert. The culvert not being kept in repair, the water escaped and damaged the property demised to the lessee with whom the covenant for quiet enjoyment had been made. It was held that under that covenant the lessor had the duty of keeping the culvert in repair so as not to cause damage to the premises leased to the lessee, and was liable for the breach of covenant.

2. *Stock and Crops.*—By regulations made by the local authority for the County of Buckingham under the Sheep Scab (Amendment) Order, 1923, it was provided that sheep should be dipped as therein mentioned within a certain time after their arrival at a place of destination in this county, but the regulations were not to apply "to sheep which have within four weeks prior to their arrival in the district been double dipped in the manner provided by these regulations." In *Adams* v. *Galloway* (23 L.G.R., 588) it was held the words "double dipped" meant "twice dipped" and not dipped for a second time after a first dipping which took place before the commencement of the four weeks.

In *Dower & Co.* v. *Corrie MacColl & Sons* (42 Times L.R., 43), there was a sale of a quantity of barley to the plaintiffs "in the usual bags." The plaintiffs when it was delivered claimed to reject it on the ground of bad quality, and on the claim being referred to arbitration, it was awarded that they were entitled to reject and the sellers must refund the price. The sellers refused to carry out the award on the ground that the plaintiffs must return the barley to them in the condition in which they received it, which they were unable to do because, on receipt of the barley, they had turned it out of the bags and had bulked it in a warehouse and afterwards put it in different bags. It was held by the Court that the sellers must accept the rejection, as the contract was for the sale of barley not for the sale of barley in particular bags, and the plaintiffs were prepared to return the actual barley received by them.

3. *Adulteration.*—*Bridges* v. *Griffin* (94 L.J.K.B., 728; [1925] 2 K.B., 233) was a remarkable case where milk in its natural state was placed in a churn and some hours later when the cream had risen naturally to the surface but the milk had not otherwise been tampered with, a purchaser who asked for a

sample of new milk was served by drawing the milk off by a tap at the bottom of the churn. The milk so sold was found to be deficient in milk fat to the extent of 46 per cent. It was held that an offence had been committed, for there had been an abstraction of milk fat and the milk sold was not of the natural substance and quality demanded. It is not sufficient that the bulk from which the milk sold is taken should be in its natural state if the milk actually sold is not so.

In *Redman* v. *Knapp* (42 Times L.R., 131) it was held that "he purchased the milk with a written warranty" is not available as a defence to a vendor of milk adulterated by the addition of colouring matter contrary to Section 4 of the Milk and Dairies (Amendment) Act, 1922, which prohibits the sale of any milk to which colouring matter has been added, but neither includes such defence nor contains any provision that it is to be read with any Act containing such a defence.

4. *Taxes.*—In a Scottish case of *Lean* v. *Ball* ([1925] Sc. L.T., 617), 33 acres of grass land were occupied as a poultry farm, half an acre being cultivated for the production of green food for the poultry, and it was held that the land was occupied for the purposes of husbandry, and therefore the occupiers were liable to assessment for income tax under Schedule B and not under Schedule D.

5. *Miscellaneous.*—In *Yorkshire (E.R.) County Council* v. *Selby Bridge Proprietors* ([1925] Ch., 841), a toll bridge had been built under a statute of 1791 in place of an ancient ferry in a public highway with approaches which by the Act were to be considered part and parcel of the bridge. It was held that as the old highway consisted of the approaches to the ferry *plus* the passage across the river, and the substituted highway consisted of the approaches to the bridge *plus* the bridge, and as the old approaches were highways to which adjoining owners would be entitled to access, the substituted approaches were highways to which adjoining owners had similar rights of access. In *Moser* v. *Ambleside Urban Council* (23 L.G.R., 533), it was held that there may be dedication of a public right of way to a terminal point, *e.g.* to a place whence a waterfall may be viewed, so that any person using it must return the same way, but such a public right of way cannot be established merely by evidence of user as distinguished from dedication.

Reddaway v. *Lancashire County Council* (41 Times L.R., 422) was a case where, by an order purporting to be made under the Small Holdings and Allotments Acts, 1908 to 1919, a county council made an order to enforce its compulsory powers of hiring land, but it was contended that the council had not complied with the condition precedent imposed by Section 7, Sub-section 2 of the Act of 1908, namely, that the council has been unable to acquire suitable land elsewhere on reasonable terms. The Court refused to grant an injunction to restrain the council from proceeding upon its order, as under Section 39, Sub-section 3, the order had no force until confirmed by the Minister of Agriculture and Fisheries and the Ministry had at the time seisin of the matter and an inquiry was in progress as to whether the order should be confirmed or not.

In *Barnard* v. *Evans* (94 L.J.K.B., 932; [1925] 2 K.B., 794), a farm labourer shot a dog which was trespassing on his employer's land. On an information preferred against him for cruelly ill-treating the dog, the justices found that it was not necessary to use a shot-gun to drive the dog out of the field, and that substantial suffering was caused to the dog although it was not killed. The dog was not doing any damage and the labourer made no effort to drive it away before he shot it, which he did on the instructions of his master. It was held by the Divisional Court that he was guilty of "cruelly ill-treating" the dog within Section 1 of the Protection of Animals Act, 1911, and the justices were directed to convict.

AUBREY J. SPENCER.

Lincoln's Inn.

AGRICULTURAL STATISTICS, 1925.

(The Society is again indebted to the Ministry of Agriculture and Fisheries for its kindness in supplying, for inclusion in the Journal, the usual detailed and comparative tables of the latest agricultural statistics. For fuller information than can be given in the space available here, the Department's own admirable series of Reports on Agricultural Statistics should, of course, be consulted.—ED.)

ACREAGE.

TABLE I gives particulars of the acreage under the principal crops and of the numbers of live-stock.

One of the most noticeable features of the Returns during the last few years has been the acceleration of the shrinkage of the total area under cultivation. The total extent of land under crops and grass in England and Wales in 1925 represents a decrease of 121,000 acres compared with 1924, which following reductions in the preceding years means that over 1,300,000 acres less were under cultivation in 1925 than before the War. The distribution of the shrinkage as between arable land and permanent grass is a reduction compared with 1914 of 300,000 acres under the plough and 1,000,000 acres of pasture.

The process that had been proceeding over a long period prior to 1914 of a steady diminution of the land under crops being accompanied by an increase in the area under permanent grass, after having been interrupted by the War appears to have now been resumed, arable land in the last three years having declined by 499,000 acres and permanent grass increased by 311,000 acres. Comparing the relative position by means of three-year averages, the proportion of arable land to the total area under crops and grass over the period 1912–1914 was 41 per cent., whereas over the period 1923–1925 the proportion was increased to 42·3 per cent. Although, however, recent years as compared with pre-war show a higher proportion of land under plough, the immediate tendency as indicated by the figures for each of the last three years is in the other direction, the proportion of arable to the total area of crops and grass which was 43·1 per cent. in 1923 having fallen to 42·2 per cent. in 1924 and to 41·5 per cent. in 1925.

Glancing briefly at the changes in individual crops the number of acres returned as under *Wheat* in 1925 was 45,000 acres (3 per cent.) less than in 1924. After the fall from the record acreage of 2,557,000 acres at the close of the War, the area under Wheat except for a revival in 1921 has shown a persistent decline to the extent that in 1925 there were 1,000,000 acres (41 per cent.) less under cultivation than in 1918. Compared with the average of the three years 1912–1914, the wheat area in 1925 was 291,000 acres (16 per cent.) less.

Barley showed a slight revival in 1925, the acreage in England being increased by 11,000 acres, although somewhat set off by a decrease of 7,000 acres in Wales. The area under this cereal was not so much influenced by war conditions as in the case of wheat, the highest area in recent years being the 1,637,000 acres recorded in 1920, which was over 300,000 acres more than last year. The 1,317,810 acres in 1925 represented a fall of 189,000 acres (13 per cent.) on the average of 1912 to 1914.

After a slight recovery in 1924, *Oats* fell in 1925 by nearly 170,000 acres. Compared with the pre-War average the acreage under this crop shows no very startling change, the decrease being only 6 per cent., although in point of fact the 1,868,000 acres of 1925 is the smallest area under this crop in any year since 1888.

Of the pulse crops, *Beans* in shrinking to 190,800 acres (i.e. 50,900 acres below 1924) occupied the smallest area ever recorded. The area devoted to this crop represents a shrinkage of a little less than 90,000 acres compared with the average immediately before the War and is only half that in the 'eighties of the last century.

The area under *Peas* has fluctuated considerably during the last few years and the decline of 40,000 acres in 1925 followed an increase of 30,000 in the previous year.

Since the violent drop of nearly 100,000 acres in 1923 the area under *Potatoes* has been more stable, the decrease of 14,000 acres in 1924 being followed by an increase of 41,000 acres in 1925, the total area in the latter year being 493,000 acres. Compared with the pre-war position the potato area on the average of the three years 1923–1925 was 471,000 acres as against an average during 1912–1914 of 456,000 acres.

Among the Root crops the decline of *Turnips and Swedes* is again noticeable, the 806,000 acres of 1925 representing a fall of 26,000 acres compared with the previous year. In none of the last five years has the area under this crop reached 900,000 acres, whereas the average area in the five years immediately preceding the War was 1,084,000 acres.

The area under *Mangold* declined for the fourth year in succession, the area in 1922 (422,000 acres) having however been the highest since 1914. The area of 359,000 acres in 1925 compares with an average of 446,000 acres during the years 1912–1914.

The area under *Hops* in 1925 showed an increase of 359 acres following an increase of 1,000 acres in the previous year and thus restoring the greater part of the shrinkage of 1,500 acres in 1923. The total area of 26,256 acres in 1925 was, however, considerably below the pre-war ten-year average of 39,000 acres. It is a striking commentary on the changing habits of the people of this country to observe that in 1885 71,000 acres of hops were grown, in 1891 56,000 acres, and in 1911 33,000 acres. Of the 1925 total Kent contributed 16,000 acres (62 per cent.), Hereford being the next highest producing county with 4,000 acres (16 per cent.).

Whilst *Clover and Rotation Grasses* for Hay declined by 30,000 acres, that not used for Hay increased by nearly 56,000 acres, resulting in a net gain of 26,000 acres on the combined totals. The 2,574,000 acres in 1925 was, however, over 100,000 acres below the pre-war average.

The hopes which are entertained of a stimulus of the subsidy for *Sugar-Beet* rendering this crop one of the leading features of agriculture in this country, make the acreage returns of special interest. From an area of 2,300 acres in 1914 the sugar-beet crop increased to 8,000 acres in 1921 and 1922 followed by 16,900 acres in 1923, 22,441 acres in 1924 and a jump to 54,750 acres in 1925. Of the total area in 1925, Norfolk contributed 15,500 acres (28 per cent.), Suffolk 11,900 acres (22 per cent.), the other counties with over 1,000 acres being Cambs. 2,394 acres, Ely 5,779 acres, Essex 1,631 acres, Hunts. 1,359 acres, Lincolnshire 7,000 acres (Kesteven, 3,025 ; Lindsey, 2,298 ; Holland, 1,866) ; Nottingham, 1,630 and the East Riding, 1,037 acres.

It is too early as yet to obtain any definite indication of the effect of the extension of sugar-beet in displacing the acreage under other crops, but it is interesting to observe that the area devoted to sugar beet in Norfolk and Suffolk in 1925 represented 2 per cent. of the total area under crops in each of those counties, the highest proportion in any one county being 3·5 per cent. in Ely.

LIVE-STOCK.

All classes of *Horses* except one shared in the decline in numbers from 1,232,000 in 1924 to 1,164,000 in 1925, i.e. a drop of 68,000 or 6 per cent. Of the total, those used for agricultural purposes accounted for 773,000 (66 per cent.) as against the 782,000 of the previous year. This was 152,000 less than the average of 1905–1914 but not very far below the number in the last year of that decade (791,000). Although stallions increased from 4,700 to 4,800 the numbers compared unfavourably with the average of the preceding ten years (6,960).

The numbers of *Cattle* have been steadily rising since 1921, and the latest figure of 6,163,000 (which was 269,000, or 5 per cent. in advance of the previous year) was greater than at any time before the War and not far behind the 1917 record of 6,227,000. As compared with the average of 1905–1914 the present position reveals an increase of 355,000 or 6 per cent. All categories contributed their quota towards the progressive movement, those between one and two years old being prominent with a jump of 93,000 (9 per cent.). Cows and Heifers in calf and in milk rose from 2,663,000 to 2,713,000, thus setting up a new standard for these classes.

Sheep recorded a further satisfactory increase, advancing by 1,132,000 (8 per cent.) to 15,975,000, thus reaching the highest level of post-war years and more than making good the fall from 15,124,000 of 1919 to 13,386,000 in 1923. The average of the decade 1905–1914, however, stood considerably higher at 18,716,000. Lambs showed the greatest individual increase, rising from 6,292,000 to 6,705,000, i.e. by 414,000 or 7 per cent. Ewes kept for breeding did nearly as well, an additional 404,000 being kept. Even so, the total of 6,397,000 was 12 per cent. below the pre-war average.

The stimulus given to pig breeding in 1924 was followed by a heavy decline in 1925, the numbers falling from 3,228,000 to 2,644,000 or by 584,000 (18 per cent.). The latest position, however, may be not considered unsatisfactory having regard to the fact that the average of the previous ten years stood at 2,264,000 and that of 1905–1914 at 2,386,000. It is interesting to recollect that the record low year was 1918 with its 1,697,000. Breeding sows declined from 449,000 to 316,000 and bacon pigs from 2,747,000 to 2,303,000.

PRODUCTION OF CROPS.

Particulars of the production and yield per acre of the principal crops are given in Table II.[1]

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[1] Although the table includes particulars for Scotland, the requirements of space make it necessary to confine this review to England and Wales.

So far as *Wheat* is concerned, despite the reduction in the area sown the total production was above expectations, the yield per acre (18·2 cwt., i.e. nearly 33 bushels) being well over average. At 1,360,000 tons the total output in England and Wales was below that of the preceding year by only 3,000 tons. Even so, the fact that it was lower than at any time during the last twelve years must not be overlooked, and but for the particularly good yield the continued decline would have been much more pronounced.

Although the acreage under *Barley* in England and Wales increased by 3,500 in 1925, the production at 1,010,000 tons was 4,000 tons less than in 1924, owing to a slight drop in the out-turn per acre in England which, however, at 15·4 cwt. was as in 1924 well above the recent average.

The total of 1,379,000 tons of *Oats* produced in 1925 was 100,000 tons less than in the preceding year but was nevertheless some 26,000 tons ahead of 1923—in which year the crop began to recover from the set-back sustained in 1922. The average annual production of oats in England and Wales during 1923–1925 was 1,450 thousands of tons compared with 1,288 thousands of tons during 1912–1914. The average yield per acre in England in 1925 was again well above average, being in fact the same as in 1924, i.e. 15·1 cwt.

The total production of the three main Corn crops in England and Wales amounted to 3,749,000 tons as against 3,876,000 tons in 1924. This compares unfavourably with the average of the ten years 1914–1923 (4,255,000 tons), and even more so with the average over 1912–1914 which stood at 4,283,000 tons.

The heavy shrinkage in the acreage under *Beans* in 1925 naturally resulted in a greatly reduced production, the crop being estimated at only 159,000 tons as against 187,000 tons in 1924. The yield per acre was, however, excellent, being 2 cwt. above average. Over the period 1921–1924 the bean crop varied within the limits of 180,000 and 189,000 tons compared with 1914, when 250,000 tons were produced.

The total output of *Peas* also suffered owing to the drop in acreage, but the yield per acre was again above average, although in England slightly below that of 1924. From 1922–1924 the production of peas increased by 23,000 tons, after a loss of 29,000 tons in 1921, but in 1925 the crop was 15,800 tons less than in 1924.

The increase of 41,000 acres in the area under *Potatoes*, coupled with the good yield, resulted in over half a million more tons being produced in 1925 than in 1924. The 3,214,000 tons compared favourably with the average of 3,148,000 tons for 1914–1923, and is the heaviest crop since the 4,012,000 tons of 1924.

With the exception of 1921 the production of *Turnips* and

Swedes in 1925 was the smallest for the last twelve years, the reduced acreage being accompanied by a somewhat poor yield per acre. The quantity of 9,198,000 tons produced in 1925 was over 2¼ million tons below that of the previous year and compared very unfavourably with the average of 1914–1923 (11,617,000 tons).

In 1925 *Mangolds* were again a good crop, the yield per acre being 20 tons as compared with the ten-year average of 19·1 tons. Owing, however, to the decreased acreage the total production fell by 693,000 tons.

Although the yield of "seeds" *hay* at 30½ cwt. per acre was again over-average, it fell 2 cwt. below the bumper crop of 1924, and consequently coupled with the somewhat reduced acreage the total production in 1925 fell to 2,562,000 tons as against 2,787,000 tons in 1924. The yield per acre from pasturage also fell below that of 1924, the total crop declining by 674,000 tons to 4,538,000 tons. Nevertheless at 7,100,000 tons the total production of all kinds of hay was above the average of the ten years 1914–1925 (6,927,000 tons).

As will be seen from Table III, the production of *Hops* declined in every area except the Weald of Kent where the 101,000 cwt. of 1925 was 24,000 cwt. above the 1924 crop. Kent accounted for 252,000 cwt. as against 304,000 cwt. in the preceding year. Taking England as a whole the production fell from 444,000 cwt. in 1924, to 355,000 cwt. in 1925. Although the yield of 13·5 cwt. per acre in 1925 was quite satisfactory it should be remembered that 1924 was an exceptionally good year, the yield per acre then being 17·1 cwt. as against the ten-year average of 11·0 cwt.

PRICES.

The monthly index numbers prepared by the Ministry of Agriculture and Fisheries show that over 1925 prices of agricultural produce grown in this country averaged out at 58 per cent. above pre-war as compared with 59 per cent. in 1924, 56 per cent. in 1923, 69 per cent. in 1922, 123 per cent. in 1921 and 191 per cent. in 1920. Although the decrease in the average of 1925 as a whole compared with the previous year was only slight, prices towards the end of 1925 were appreciably lower than in the same period of 1924, the average for October–December 1925 being 53 per cent. above pre-war as compared with 63 per cent. during the corresponding months in the previous year.

Tables IV and V give the average prices of British Corn during each week of 1925 and the annual averages for the last ten years. It will be seen that Wheat finished the year 1*d*. per cwt. higher than it started, the highest and lowest levels being the 13*s*. 10*d*. and 10*s*. 3*d*. of February 14 and October 17 and 24 respectively. At 12*s*. 2*d*. per cwt. for 1925 the price of British

Wheat was the highest annual average since 1921 when it stood at 16*s*. 8*d*. per cwt. Barley opened in January at 14*s*. 5*d*. and closed at 10*s*. 6*d*.—a drop of 3*s*. 11*d*. per cwt. An upward movement occurred in the Autumn, prices advancing from 10*s*. at 1st August to 15*s*. 3*d*. at 5th September, thereafter relapsing at regular stages to 10*s*. 6*d*. The annual average price compared unfavourably with the former year (11*s*. 9*d*. as against 13*s*. 1*d*.) but was better than in 1922 and 1923. Oats enjoyed a spell of about five months out of the twelve with prices exceeding 10*s*. per cwt. The year commenced with a figure of 9*s*. 9*d*. and closed at 9*s*. 3*d*., resulting in an annual average of 9*s*. 9*d*. This was the same as in the preceding year and 2*d*. in excess of 1923.

In Tables VI and VII are given the monthly average prices of fat stock and milking cows for 1924 and comparisons of the annual averages since 1915. Over the year as a whole prices of cattle showed little variation from those prevailing in 1924. First quality Shorthorns fetched 3*d*. per stone dead weight and second quality beasts, 2*d*. less. Second quality Devons at 12*s*. 6*d*. were 4*d*. higher than in the preceding year. With the exception of second quality Herefords prices of all grades of cattle were within 1*d*. or 2*d*. per stone of those in 1923. In most instances, as usual, May was the peak month, the lowest levels being reached in October. Prices of milking cows were distinctly less favourable in 1925 than in 1924, the first quality Shorthorns in milk fetching £34 9*s*. per head as against £36 9*s*. per head and first quality Calvers £32 6*s*. as against £33 2*s*. The monthly returns are not absolutely complete owing to the closing of store markets during December due to outbreaks of foot-and-mouth disease, but the effect of this on the annual average is probably slight.

Of the fat sheep Downs remained stationary at 16¾*d*. per lb. for first quality and 14¾*d*. per lb. for second quality. Longwools lost ½*d*. per lb. over the year and Crossbreds ¼*d*. per lb. The general trend of prices showed an upward movement for the first three months of the year followed by a gradual fall. The gain recorded by first quality Downs of ¼*d*. per lb. in April was an outstanding feature.

1925 seems to have been a good year for pig producers. First quality bacon pigs rose from 10*s*. 6*d*. to 12*s*. 6*d*. per stone dead weight, whilst first quality porkers gained 1*s*. 10*d*. on 11*s*. 5*d*. Second qualities of both were equally satisfactory. The fall from May to August was followed by a well-maintained increase during the remaining four months of the year.

TABLE I.—Acreage under Crops and Grass; *and* Number *of* Live Stock *on the 4th June,* 1925, *and 4th June,* 1924, *in England and Wales.*

	England (excluding Monmouth)		Wales (including Monmouth)	
	1925	1924	1925	1924
Total Area (excluding water)	Acres 32,037,243		Acres 5,098,762	
Total Acreage under Crops and Grass[1]	22,965,590	23,071,882	2,789,896	2,805,415
Arable Land	10,000,453	10,227,726	681,600	700,947
Permanent Grass for Hay	3,719,300	3,897,304	592,326	604,144
,, ,, not for Hay	9,245,837	8,946,352	1,515,970	1,500,324
Rough Grazings	3,418,704	3,357,488	1,605,589	1,588,850
Wheat	1,476,292	1,518,188	23,336	26,616
Barley	1,264,983	1,254,452	52,827	59,620
Oats	1,688,608	1,851,827	179,568	186,121
Mixed Corn	106,516	115,631	17,908	18,899
Rye	49,862	58,314	200	328
Beans	189,896	240,567	917	1,127
Peas	130.664	170,442	498	720
Potatoes	469,655	428,566	23,586	23,676
Turnips and Swedes	759,051	783,394	47,410	49,070
Mangold	348,314	378,090	10,759	11,570
Cabbage for fodder, Kohl-rabi and Rape	115,827	125,846	11,812	11,325
Vetches or Tares	87,992	111,595	506	705
Lucerne	53,851	64,368	169	247
Hops	26,256	25,897	—	—
Small Fruit[2]	67,496	72,429	856	1,086
Orchards[2]	232,715	234,087	5,366	5,390
Clover, Sainfoin and Grasses under Rotation, for Hay	1,537,315	1,564,757	184,773	187,279
Clover, Sainfoin and Grasses under Rotation not for Hay	738,722	686,800	112,914	108,851
Other Crops	230,453	226,888	2,420	2,682
Bare Fallow	457,147	349,611	6,057	5,988
	No.	No.	No.	No.
Horses used for Agriculture[3]	686,915	695,116	86,285	87,378
Stallions being used for service	3,653	3,526	1,147	1,181
Unbroken Horses: One year and above	119,295	147,263	24,441	29,452
Unbroken Horses: Under one year	34,416	42,215	10,459	12,586
Other Horses on Agricultural Holdings	172,547	187,240	25,082	26,241
TOTAL OF HORSES	1,016,826	1,075,360	147,414	156,838
Cows and Heifers in Milk	1,765,555	1,746,750	269,506	267,491
Cows in Calf but not in Milk	268,607	250,500	31,050	31,056
Heifers in Calf	346,311	334,333	32,143	33,072
Bulls being used for service	73,906	69,970	12,136	11,972
Other Cattle: Two years and above	886,128	823,312	88,716	81,505
Other Cattle: One year and under two	993,021	903,732	184,666	180,654
Other Cattle: Under one year	1,011,737	967,084	199,848	192,898
TOTAL OF CATTLE	5,345,265	5,095,681	818,065	798,648
Ewes kept for Breeding	4,684,551	4,354,046	1,712,540	1,639,535
Rams and Ram Lambs to be used for service	130,447	123,651	50,177	49,926
Other Sheep: One year and above	2,110,509	1,798,094	581,182	586,109
Other Sheep: Under one year	5,158,247	4,826,224	1,547,141	1,465,610
TOTAL OF SHEEP	12,083,754	11,102,015	3,891,040	3,741,180
Sows kept for Breeding	288,779	410,961	27,675	38,061
Boars being used for service	22,994	30,446	1,484	1,820
Other Pigs	2,129,728	2,527,925	173,696	219,117
TOTAL OF PIGS	2,441,501	2,969,332	202,855	258,998

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[1] Not including Rough Grazings.

[2] Including Small Fruit in Orchards, which in 1925 totalled 31,162 acres in England and 282 acres in Wales.

[3] Including Mares kept for breeding.

TABLE II.—Total Produce, Acreage, and Yield per *(a) in* 1925 *and* 1924, *with the Average yield*

Crops	Total Produce		Acreage		Yield per Acre		Average of the Ten Years
	1925	1924	1925	1924	1925	1924	1915–1924
WHEAT.	Tons	Tons	Acres	Acres	Cwt.	Cwt.	Cwt.
*England . . .	1,343,000	1,344,000	1,476,160	1,518,148	18·2	17·7	17·2
†Wales . . .	17,000	19,000	23,336	26,616	15·1	14·3	15·0
Scotland . .	54,000	49,000	48,617	49,449	22·4	19·8	21·1
GREAT BRITAIN .	1,414,000	1,412,000	*c* 1,548,113	*c* 1,594,213	18·3	17·7	17·2
BARLEY.*b*							
*England . . .	975,000	977,000	1,264,757	1,254,433	15·4	15·6	14·7
†Wales . . .	35,000	37,000	52,827	59,593	13·2	12·3	13 2
Scotland . .	143,000	129,000	152,901	151,588	18·6	17·1	16·9
GREAT BRITAIN .	1,153,000	1,143,000	*d* 1,470,485	*d* 1,465,614	15·7	15·6	14·8
OATS.							
*England . . .	1,278,000	1,401,000	1,688,151	1,851,098	15·1	15·1	13·7
†Wales . . .	101,000	98,000	179,460	185,999	11·2	10·5	11·1
Scotland . .	716,000	701,000	925,995	955,535	15·5	14·7	14·3
GREAT BRITAIN .	2,095,000	2,200,000	*e* 2,793,606	*e* 2,992,632	15·0	14·7	13·7
BEANS.							
*England . . .	158,400	186,500	178,612	226,727	17·7	16·4	15·4
†Wales . . .	500	680	691	880	15·3	15·5	15·4
Scotland . .	3,000	3,500	3,409	3,732	17·6	18·7	19·1
GREAT BRITAIN .	161,900	190,680	(*f*) 182,712	(*f*) 231,339	17·7	16·5	15·5
PEAS.							
*England . . .	64,300	80,100	88,347	108,099	14·6	14·8	13·6
†Wales . . .	100	100	139	202	12·2	8·9	11·1
Scotland . .	30	23	60	57	9·8	8·3	11·1
GREAT BRITAIN .	64,430	80,223	(*f*) 88,546	(*f*) 108,358	14·6	14·8	13·6

* Excluding Monmouth. † Including Monmouth.

(*a*) The particulars for Scotland have been furnished by the Board of Agriculture for Scotland.

(*b*) Including Bere.

(*c*) Exclusive of a certain area (amounting in 1925 to 132 acres) the produce of which was cut green.

(*d*) Exclusive of a certain area (amounting in 1925 to 246 acres) the produce of which was cut green.

(*e*) Exclusive of a certain area (amounting in 1925 to 565 acres) the produce of which was cut green.

(*f*) Exclusive of a certain area (amounting in 1925 to 11,510 acres of beans and 43,073 acres of peas) the produce of which was cut or picked green.

Acre *of each of the* **Principal Crops** *in* **Great Britain** *per acre of the Ten Years* 1915-1924.

Crops	Total Produce		Acreage		Yield per Acre		Average of the Ten Years 1915–1924
	1925	1924	1925	1924	1925	1924	
POTATOES.	Tons	Tons	Acres	Acres	Tons	Tons	Tons
*England . . .	3,078,000	2,590,000	469,655	428,566	6·6	6·0	6·2
†Wales . . .	136,000	106,000	23,586	23,676	5·8	4·5	5·3
Scotland . .	995,000	845,000	142,155	138,281	7·0	6·1	6·5
GREAT BRITAIN .	4,209,000	3,541,000	635,396	590,523	6·6	6·0	6·2
TURNIPS AND SWEDES.							
*England . . .	8,586,000	10,938,000	758,076	781,825	11·3	14·0	12·5
†Wales . . .	612,000	600,000	47,410	49,070	12·9	12·2	31·7
Scotland . .	6,815,000	6,752,000	395,940	405,693	17·2	16·6	16·7
GREAT BRITAIN .	16,013,000	18,290,000	*g* 1,201,426	*g* 1,236,588	13·3	14·8	13·8
MANGOLDS.							
*England . . .	6,940,000	7,650,000	347,226	376,478	20·0	20·3	19·1
†Wales . . .	190,000	173,000	10,759	11,570	17·7	14·9	17·1
Scotland . .	20,900	22,700	1,117	1,316	18·7	17·2	18·5
GREAT BRITAIN .	7,150,900	7,845,700	(*h*) 359,102	(*h*) 389,364	19·9	20·2	19·1
HAY *from* CLOVER, SAINFOIN, &C.					cwt.	cwt.	cwt.
*England . . .	2,341,000	2,542,000	1,537,315	1,564,757	30·5	32·5	28·9
†Wales . . .	221,000	245,000	184,773	187,279	24·0	26·2	24·8
Scotland . .	647,000	720,000	403,097	415,322	32·1	34·7	31·1
GREAT BRITAIN .	3,209,000	3,507,000	2,125,185	2,167,358	30·2	32·4	29·0
HAY *from* PERMANENT GRASS.							
*England . . .	3,999,000	4,592,000	3,719,300	3,897,304	21·5	23·6	21·0
†Wales . . .	539,000	620,000	592,326	604,144	18·2	20·5	19·4
Scotland . .	245,000	254,000	156,244	154,765	31·3	32·8	30·5
GREAT BRITAIN .	4,783,000	5,466,000	4,467,870	4,656,213	21·4	23·5	21·1

(*g*) Exclusive of a certain area (amounting in 1925 to 975 acres) on which the crops were grown for the production of seed.

(*h*) Exclusive of a certain area (amounting in 1925 to 1,088 acres) on which the crops were grown for the production of seed.

TABLE III.—Hops:—*Total Produce, Acreage, and Yield per Acre, in* 1925 *and* 1924, *in each County of England in which* Hops *were grown; and the Average Yield of the Ten Years* 1915–1924.

Counties		Total Produce		Acreage		Yield per Acre		Average of the Ten Years 1915–24
		1925	1924	1925	1924	1925	1924	
		Cwt.	Cwt.	Acres	Acres	Cwt.	Cwt.	Cwt.
TOTAL FOR ENGLAND		355,000	444,000	26,256	25,897	13·5	17·1	11·0
Kent	East	63,000	70,000	3,693	3,659	17·1	19·2	11·9
	Mid	88,000	109,000	5,418	5,411	16·2	20·2	12·9
	Weald	101,000	125,000	7,150	6,897	14·2	18·1	11·3
	Total Kent	252,000	304,000	16,261	15,967	15·5	19·1	12·0
Hampshire		13,000	16,000	1,045	1,037	12·3	15·3	10·1
Surrey		2,200	4,200	179	216	12·2	19·5	9·0
Sussex		28,000	44,000	2,413	2,389	11·6	18·2	10·5
Hereford		40,000	50,000	4,186	4,101	9·5	12·3	8·6
Worcester		19,000	25,000	2,059	2,080	9·3	11·9	9·1
Other Counties[1]		950	1,200	113	107	8·4	10·8	7·0

[1] Salop, Gloucester and Berkshire.

TABLE IV.—*Average* Prices of British Corn *per cwt.* (*of* 112 *Imperial Standard lbs.*)[1] *in England and Wales, as ascertained under the Corn Returns Act*, 1882, *and the Corn Sales Act*, 1921, *in each Week of the Year* 1925.

1925 Received in Week Ended		Wheat		Barley		Oats	
		s.	*d.*	*s.*	*d.*	*s.*	*d.*
January	3	12	4	14	5	9	9
”	10	12	9	14	10	9	11
”	17	13	1	14	9	10	1
”	24	13	2	14	8	10	2
”	31	13	4	14	0	10	2
February	7	13	8	13	5	10	3
”	14	13	10	13	1	10	3
”	21	13	7	12	8	10	1
”	28	13	5	12	4	9	11
March	7	13	5	12	2	9	9
”	14	13	5	11	6	9	9
”	21	13	4	11	5	9	9
”	28	12	11	11	1	9	9
April	4	12	6	10	10	9	5
”	11	12	3	10	9	9	7
”	18	12	2	10	4	9	6
”	25	12	2	10	7	9	6
May	2	12	4	10	4	9	9
”	9	12	5	10	8	9	11
”	16	12	8	10	6	10	0
”	23	12	10	10	5	10	4
”	30	12	11	10	5	10	5

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[1] Section 8 of the Corn Returns Act, 1882, as amended by Section (2) of the Corn Sales Act, 1921, provides that in the weekly summary of quantities and prices each sort of British corn shall be computed with reference to the hundredweight of one hundred and twelve imperial standard pounds.

TABLE IV—*continued.*

1925 Received in Week Ended	Wheat	Barley	Oats
	s. d.	*s. d.*	*s. d.*
June 6	13 0	10 5	10 4
„ 13	13 0	10 6	10 5
„ 20	12 10	10 2	10 4
„ 27	12 7	10 0	10 5
July 4	12 3	9 10	10 5
„ 11	11 11	10 2	10 2
„ 18	11 9	10 0	10 4
„ 25	11 9	10 4	10 4
August 1	11 11	10 0	10 3
„ 8	11 10	11 2	10 3
„ 15	11 9	12 1	10 1
„ 22	11 9	13 10	9 11
„ 29	11 7	14 6	9 8
September 5	11 8	15 3	9 9
„ 12	11 8	14 4	9 8
„ 19	11 6	13 7	9 8
„ 26	11 3	13 4	9 7
October 3	10 11	12 9	9 6
„ 10	10 4	12 5	9 4
„ 17	10 3	12 4	9 2
„ 24	10 3	12 1	9 1
„ 31	10 7	11 11	9 0
November 7	10 11	11 8	9 0
„ 14	11 1	11 9	9 1
„ 21	11 3	11 5	9 2
„ 28	11 5	11 3	9 1
December 5	11 10	10 9	9 3
„ 12	12 3	10 10	9 3
„ 19	12 7	10 8	9 4
„ 26	12 5	10 6	9 3
Average for year	12 2	11 9	9 9

TABLE V.—**Annual Average Prices** *per cwt.* (*of* 112 *Imperial Standard lbs.*) *of* **British Wheat, Barley, and Oats,** *in England and Wales, in each year from* 1916 *to* 1925, *as ascertained under the Corn Returns Act,* 1882, *and the Corn Sales Act,* 1921 ; *with the* **Value** *of* £100 *of* **Tithe Rent-Charge.**

Year	Annual Average Price per cwt.			Value of Tithe Rent-Charge of £100
	Wheat	Barley	Oats	
	s. d.	*s. d.*	*s. d.*	*£ s. d.*
1916	13 7	15 0	12 0	92 1 0¼
1917	17 8	18 1	17 11	109 3 11
1918	17 0	16 6	17 9	[1]109 3 11
1919	17 0	21 2	18 9	109 3 11
1920	18 10	25 0	20 5	109 3 11
1921	16 8	14 7	12 3	109 3 11
1922	11 2	11 2	10 5	109 3 11
1923	9 10	9 5	9 7	109 3 11
1924	11 6	13 1	9 9	109 3 11
1925	12 2	11 9	9 9	[2]109 3 11

[1] The Tithe Act, 1918, fixes the value of Tithe Rent-Charge, up to the year 1925 inclusive, at the sum payable in 1918, i.e. the value based on the septennial averages for the period ended 1917.

[2] As regards any sum becoming payable in respect of Tithe Rent-Charge before the appointed day to be fixed by Order in Council under the Tithe Act, 1925, the value is to be taken at £109 3*s.* 11*d.* for every £100 Tithe Rent-Charge, commuted value (see Sections 1 and 25 of the Tithe Act, 1925).

TABLE VI.—Monthly *Average* Prices *of* Fat Stock *and* Milking Cows *in England and Wales during the Year* 1925.

Description	Quality	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		Per cwt. live weight.												
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
FAT CATTLE:														
Shorthorns	1	59 3	59 2	59 11	61 4	63 0	62 2	59 9	59 3	58 8	57 7	58 6	60 5	59 11
	2	51 4	51 10	52 3	53 11	55 3	55 0	53 1	52 6	51 4	49 2	49 1	50 11	52 2
Herefords .	1	58 10	60 5	61 9	62 11	65 0	63 2	60 8	59 3	58 10	57 0	58 1	59 7	60 5
	2	52 3	54 1	55 5	56 7	57 2	55 9	53 1	51 11	51 5	50 1	50 8	52 7	53 5
Devons .	1	57 6	57 10	59 9	58 11	61 3	60 9	59 1	57 9	57 8	56 9	59 3	60 0	58 10
	2	52 0	52 6	54 0	54 2	55 3	56 0	52 6	51 3	52 4	47 0	45 6	50 9	51 11
Fat Cows .	1	45 10	46 7	46 11	47 9	48 10	48 4	45 5	44 7	44 7	42 10	43 7	45 1	45 10
	2	38 8	38 5	38 11	39 9	40 9	39 11	38 2	37 9	37 3	35 7	35 8	36 10	38 2
		Per stone dead weight												
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Shorthorns	1	13 4	13 6	13 8	13 8	13 8	13 7	13 4	13 4	13 1	12 10	13 0	13 2	13 4
	2	11 8	11 11	12 0	12 2	12 3	12 2	11 10	11 10	11 8	11 5	11 6	11 5	11 10
Herefords .	1	12 8	12 10	14 0	14 0	14 0	13 7	13 1	13 4	13 0	12 9	12 9	13 0	13 3
	2	11 8	—	12 0	12 6	12 6	13 2	12 5	12 9	12 3	11 8	11 7	11 5	12 2
Devons .	1	13 10	13 10	14 1	14 4	14 3	14 2	13 8	13 9	13 6	13 1	13 5	13 10	13 10
	2	12 5	12 5	12 7	13 0	12 10	12 7	12 5	12 8	12 3	11 11	12 3	12 9	12 6
Fat Cows .	1	10 5	10 6	10 7	10 9	10 9	10 8	10 6	10 5	10 3	10 1	10 3	10 6	10 6
	2	8 7	8 8	8 9	8 11	9 0	8 11	8 10	8 9	8 8	8 5	8 9	8 9	8 9
		Per head												
		£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
MILKING COWS Shorthorns for Milk.	1	35 15	34 17	33 14	33 10	33 18	33 4	34 6	34 17	34 9	35 9	34 19	—[1]	34 9
	2	28 6	27 13	26 6	26 4	26 5	25 17	26 13	26 17	26 10	27 5	26 5	—[1]	26 15
Calvers .	1	33 1	32 2	31 13	30 17	31 11	31 5	32 3	33 9	33 5	33 10	32 10	—[1]	32 6
	2	26 15	26 1	25 9	25 2	25 10	25 6	25 13	25 19	25 19	26 6	24 13	—[1]	25 14
		Per lb.												
		d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
VEAL CALVES	1	13¾	14¼	14½	14½	14½	14½	13½	13½	13½	12½	12¾	12¾	13¾
	2	11¼	12	12	12¼	12¼	12¼	11½	11½	11¼	10½	11	11	11½
FAT SHEEP:														
Downs .	1	18½	18¾	19	19¼	17¾	17	16¼	16	15¼	14¾	15	14¾	16¾
	2	16¼	16¾	17	17	16	15	14	13¾	13¼	12½	12¾	12¾	14¾
Longwools	1	17	17½	18	18	16¼	15½	14½	14	13½	13¼	13½	13¼	15¼
	2	14¾	15	15¼	15	13¾	12¾	12	11½	11	11	11½	10¾	12¾
Crossbreds	1	18	18¼	18¾	18¾	17¾	16¾	15¾	15½	14¾	14¼	14½	14½	16¼
	2	16	16¼	16½	16½	15¾	14¾	13½	13¼	12½	12¼	12½	12¼	14¼
		Per stone dead weight												
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
FAT PIGS: Bacon Pigs	1	11 9	12 3	12 9	12 11	12 2	11 6	11 5	12 0	12 11	13 3	13 5	14 0	12 6
	2	10 6	11 1	11 8	11 9	11 1	10 6	10 5	10 11	11 11	12 2	12 6	13 0	11 5
Porkers .	1	12 8	13 0	13 6	13 7	12 10	12 1	12 0	12 7	13 7	14 0	14 5	15 1	13 3
	2	11 6	11 10	12 4	12 5	11 9	11 0	11 0	11 7	12 6	13 0	13 5	14 1	12 2

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[1] The majority of the store markets were closed owing to Foot and Mouth Disease Restrictions.

TABLE VII.—Yearly *Average* Prices *of* Fat Stock *and* Milking Cows *in England and Wales during the Years* 1915–1925.

Description	Quality	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
		Per stone dead weight										
		s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
FAT CATTLE:												
Shorthorns .	1	11 9	13 8	17 9	16 8	18 4	21 9	19 10	14 9	13 6	13 7	13 4
	2	10 9	12 6	16 3	16 8	18 4	20 9	18 0	12 10	11 11	12 0	11 10
Herefords . .	1	11 10	13 9	17 7	16 8	18 4	21 9	19 8	14 3	13 3	13 3	13 3
	2	10 8	12 7	16 3	16 8	18 4	21 1	—	12 10	11 9	12 4	12 2
Devons. . .	1	11 11	13 7	17 6	16 8	18 4	21 10	20 4	15 0	13 9	13 10	13 10
	2	10 10	12 1	16 0	16 8	18 4	21 3	18 10	13 5	12 4	12 2	12 6
		Per head										
		£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s.*	£ *s*	£ *s.*
MILKING COWS:												
Shorthorns:												
Shorthorns in milk . . .	1	26 6	34 5	45 3	53 15	52 11	61 6	54 13	39 3	36 6	36 9	34 9
	2	21 14	27 10	35 14	41 16	39 3	48 9	41 19	30 8	28 8	28 19	26 15
Calvers . .	1	24 18	32 19	42 2	48 17	47 14	58 1	50 19	35 15	33 8	33 2	32 6
	2	20 15	26 13	33 15	38 19	36 8	45 7	40 5	28 12	26 5	27 7	25 14
		Per lb.										
		d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
VEAL CALVES .	1	10½	12¼	16	15¼	13¾	21	18	14¼	13¾	13¾	13¾
	2	9½	11	14¼	13½	11¾	18	15¼	11¾	11½	11½	11½
FAT SHEEP:												
Downs . . .	1	11	13¼	16½	15¾	17	23	19½	18½	16¾	16¾	16¾
	2	10	12	15	15¾	17	21¾	17	15¾	14¾	14¾	14¾
Longwools .	1	10¼	12¼	15½	15½	17¼	22¼	18	16¾	15½	15¾	15¼
	2	9¼	11¼	14¼	15¾	17¼	21¼	15½	14¼	13¼	13¼	12¾
Crossbreds .	1	11	13¼	16½	16	17¼	22¾	19¾	17¾	16¾	16¾	16½
	2	10	12	15	15¾	17¼	21½	17¼	15¼	14½	14½	14¼
		Per stone dead weight										
		s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
FAT PIGS:												
Bacon Pigs .	1	9 7	12 4	16 7	19 0	21 2	24 8	17 0	14 0	12 3	10 6	12 6
	2	9 0	11 7	15 9	19 0	21 2	23 3	15 5	12 7	11 0	9 4	11 5
Porkers . .	1	10 0	13 2	17 2	19 0	21 2	25 10	18 10	15 7	13 10	11 5	13 3
	2	9 6	12 6	16 5	19 0	21 2	24 2	17 4	14 3	12 8	10 4	12 2

TABLE VIII.—*Quantities and Declared Values of* **Imports** *of the principal* **Agricultural Commodities** *into Great Britain and Northern Ireland in* 1924 *and* 1925, *with the Average of Imports into the United Kingdom for the Years* 1911 *to* 1913.

Commodities	Quantities			Declared Values		
	Annual Average, 1911-13	1924*	1925†	Annual Average, 1911-13	1924*	1925†
Grain and Meal.	Tons	Tons	Tons	£	£	£
Wheat	5,225,307	5,871,026	4,886,667	43,068,074	69,003,960	68,456,570
Wheat Meal and Flour .	537,213	552,293	456,093	5,714,439	8,325,334	8,263,526
Barley	1,118,516	1,082,818	793,685	8,071,609	12,093,314	8,573,428
Oats.	912,268	515,787	425,123	5,800,459	4,316,661	3,763,479
Oatmeal (including Groats and Rolled Oats) . .	42,285	44,428	38,525	602,913	878,447	797,223
Peas.	112,485	89,017	71,104	1,103,733	1,601,969	1,447,726
Beans (other than Haricots)	63,771	62,666	53,182‡	471,456	789,960	797,023‡
Maize	2,193,910	1,883,351	1,382,409	12,692,064	16,994,379	13,103,352
Maize Meal and Flour .	29,099	86,731	144,437	215,885	919,943	1,411,742
Meat.						
Beef	443,922	680,537	688,084	15,964,027	31,975,374	36,826,675
Mutton and Lamb . .	267,257	260,544	279,880	10,331,026	20,087,815	22,814,831
Pork (including Bacon and Hams)	316,979	542,064	517,754	19,781,134	50,847,545	57,696,030
Unenumerated (including Rabbits)	75,492	25,066	40,893	3,030,963	1,660,647	2,561,622
Total Dead Meat . . .	1,103,650	1,508,211	1,526,611	49,107,150	104,571,381	119,899,158
Butter	207,448	264,362	292,725	24,346,157	49,647,492	53,216,141
Cheese	115,908	144,376	155,108	7,196,490	13,552,406	15,711,615
Milk, Condensed . . .	60,486	110,719	112,081	2,140,602	5,739,485	5,073,608
	Gt. Hunds.	Gt. Hunds.	Gt. Hunds.			
Eggs	19,907,633	20,279,499	21,974,042	8,620,894	15,475,588	16,660,510

* Revised figures. † Subject to revision. ‡ Includes Haricots.

Note.—The figures for 1924 and 1925 include the trade of Great Britain and Northern Ireland with the Irish Free State, and exclude the direct foreign trade of the Irish Free State.

IMPORTS.

In Table VIII are given the quantities and values of imports of the principal agricultural commodities into Great Britain and Ireland in 1924 and 1925. Although for purposes of comparison with pre-War trade the average annual imports during 1911–1913 are also given, these figures relate to imports into the United Kingdom as a whole and thus include direct imports to what is now the Irish Free State. It must also be borne in mind that the imports into Great Britain and Northern Ireland in 1924 and 1925 include imports from the Irish Free State and consequently comparison of the figures for these years with those of 1911–1913 are apt to be misleading in the case of commodities like pork (including bacon), butter and eggs.

Grain and Meal.

The total imports of *Wheat* into Great Britain and Northern Ireland in 1925 were only 4,887,000 tons as against 5,871,000 tons in 1924, but the decline in the total value was proportionately much less. So far as the countries of supply are concerned, the most striking change was that in imports from the Argentine which fell from an average of 1 million cwt. in each of the years 1923 and 1924 to only half a million in 1925. On the other hand, Australian imports totalled 800,000 tons in 1925 as against 230,000 tons in 1923 and 540,000 tons in 1924. Of the other main sources of supply, Canada sent 1,500,000 tons in 1925 as against nearly 2 million tons in 1924. Receipts from the United States were 1,400,000 tons and from British India about 400,000 tons.

The imports of *wheat-meal* and *flour* in 1925 were 200,000 tons from Canada, 1,400,000 tons from the United States and 70,000 tons from Australia.

The *Barley* imports fell considerably in both quantity and value in 1925. The principal sources of supply of this commodity were the United States which sent 280,000 tons, Canada 150,000 tons, Chile 38,000 tons and Australia 17,000 tons.

The imports of *Oats* showed a decline in 1925, the principal shrinkage being in the imports from the Argentine which totalled only 65,000 tons as against 176,000 tons in 1924. The quantities from Canada and United States remained about the same as before, at about 150,000 tons from the former and 110,000 tons from the latter, and 43,000 tons were received from the Irish Free State.

The imports of *Maize* were considerably below the levels of both 1923 and 1924. Of the supply received in 1925 the bulk came from the Argentine (840,000 tons), the principal other individual source of supply being Roumania, from which 70,000 tons were received.

Meat.

Supplies of imported meat in 1925 were dearer than in the previous year, an increase of 1 per cent. in the total quantity being accompanied by an increase of 14·5 per cent. in the value declared at the Ports. Of the *beef* supplies 412,000 tons (of which 375,000 tons came from the Argentine) arrived in the form of chilled meat and 206,000 tons as frozen (including 76,000 from the Argentine and 68,000 from Australia). Practically all the *mutton* was frozen, the principal contributors being New Zealand with 125,000 tons and Argentine with 92,000 tons. Of the supplies of *pig-meat* in 1925 374,000 tons arrived as bacon (including 187,000 tons from Denmark, 75,000 tons from the United States, 63,000 tons from Canada and 23,000 tons from the Irish Free State), 76,000 tons as hams (including 65,000 tons from the United States), 50,000 tons as fresh pork (40,000 tons from Holland and 9,000 tons from the Irish Free State) and

10,000 tons as frozen (principally from the United States). Of the meat stuffs not separately enumerated the highest single item was that of 15,000 tons of rabbits (mainly Australian frozen).

Although not shown in the table attached to this article, account must also be taken of the imports of live animals for food. The total number of cattle arriving in 1925 was over 800,000 valued at £15,748,000 (including 688,000 head valued at £12,731,000 from the Irish Free State and 110,000 head valued at £2,959,000 from Canada). The Irish Free State also sent 400,000 head of sheep and lambs valued at £1,209,000, together with nearly 98,000 pigs valued at over £619,000.

Dairy Produce.

The *Butter* supply increased in 1925 to a total supply of nearly 293,000 tons, of which 83,000 tons came from Denmark, 63,000 tons from New Zealand, 58,000 tons from Australia, 24,000 tons from Argentine, 20,000 tons from the Irish Free State and nearly 15,000 tons from Russia. Of the *Cheese* supply of 155,000 tons, nearly 70,000 tons were received from New Zealand, 63,000 tons from Canada, 8,000 tons from Italy and 7,000 tons from Holland. In the case of *Condensed Milk* it will be noticed that although the imports increased slightly in quantity from 110,700 tons in 1924 to 112,000 tons in 1925 the value decreased from £5,739,000 to £5,074,000. Imports of *Eggs* increased somewhat in 1925, the principal supplies being (the figures being in great hundreds in each case) 5,836,000 from Denmark, 4,567,000 from the Irish Free State, 1,692,000 from the Netherlands and about 1 million each from Egypt, China and Poland.

Total Imports.

Although it is not possible within the limits of this article to attempt any general valuation of the total imports of food supplies and other agricultural produce to this country, it may be noted that of the £335 million spent on food imports in 1925 (£317 million on the commodities enumerated in the Table and £17½ million on live meat), some £106 million went on the purchase of grain and meal, £137½ million on meat (of which £120 million was on dead meat), and £91 million on butter, cheese, milk and eggs. It may be of interest to add that of the total amount so spent, £193 million went to foreign countries, £110 million to British Dominions and £24 million to the Irish Free State.

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NOTES, COMMUNICATIONS AND REVIEWS.

SIR J. BOWEN BOWEN-JONES, BART.

For a period of wellnigh sixty years there were few, if any, names better known in agricultural circles than John Bowen Jones, latterly known as Sir J. Bowen Bowen-Jones, Bart.

John Bowen Jones was born in London in 1840, and was the eldest surviving son of John Jones, of the City of London and of Eaton House, in the Parish of Tottenham, Middlesex, Merchant, by Anne, daughter of Thomas Bowen, of the Parish of Welshpool. He was educated at Tottenham Grammar School and at Cirencester College, where he graduated R.R.A.C. in 1859. In September 1863 he married Elizabeth Margaret, daughter of Mr. Evan Bowen, of Ensdon House, Montford. Unfortunately his wife, who died in 1904, did not live to experience the satisfaction she would have felt when, in recognition of his public services, he was created a Baronet in 1911.

From 1863 to 1872 he farmed in partnership with Mr. Evan Bowen at Ensdon House, but on the dissolution of the partnership, Mr. J. Bowen Jones took over the farm with the pedigree stock. With characteristic energy and perseverance he steadily built up his reputation as a breeder of Shropshire Sheep and Hereford Cattle, his name in connection with the breeding of Shropshire Sheep being known the world over, the Ensdon House flock being largely drawn upon for export, mainly to the United States and Canada.

He was not content with being a mere breeder and exhibitor, and he became associated with various organisations having for their objects the improvement of agriculture, and this active interest he sustained for a period of fully sixty years.

As early as 1867 Sir Bowen Bowen-Jones joined the Royal Agricultural Society, in fact, at the time of his death he was the " Father " of the Council, having been elected to the Society's governing body in 1871. During the period of more than half a century Sir Bowen served the Society in many offices. He was a steward of implements from 1881 to 1883 and from 1897 to 1899 ; he was a steward of forage in 1884, a steward of stock from 1890 to 1893, and steward of the Agricultural Education Exhibition from its inception in 1903 till 1914. He was also one of the original members of the National Agricultural Examination Board. In his younger days Sir Bowen took a prominent part in the work of many standing committees, but he will probably be best remembered for his activities as Chairman for several years of the Chemical and Woburn Committee.

Among Sir Bowen's contributions to the Society's Journal was an article on "Typical Farms in Cheshire," which he wrote in connection with the Society's visit to Chester in 1893.

Sir Bowen had been elected a Vice-President in 1905 and a Trustee in 1909. He filled the office of President in the year 1919 for the Cardiff meeting, the first post-war show, which will be remembered as the most successful ever held up to that time.

He had frequently officiated as Judge of Shropshire Sheep and Hereford Cattle at the R.A.S.E., Bath and West of England, Smithfield, Birmingham, Highland, Royal Dublin, and other agricultural shows. He had also acted as Judge and Reporter on R.A.S.E. Prize Farms. In the formation of the Shropshire Sheep Breeders' Association in 1882 he took a leading part, and was its President from its inception until 1915, a period of thirty-three years. The first volume of the Shropshire Flock Book, published in 1883, contains a short article from Sir Bowen's pen on the antiquity and history of the breed.

A recital of Sir Bowen's activities in connection with agriculture or the public good is largely the story of most of the important movements and developments of the past fifty years. He was a member of the Government Commission on Pleuropneumonia and Tuberculosis, which reported in 1888, and was one of the Royal Commissioners for the improvement of the breeding of horses. He was Past President of the Farmers' Club (London), Smithfield Club, National Sheep Breeders' Association, Shropshire and West Midland Agricultural Society, Midland Farmers' Club, Royal Agricultural College Club, and of the Shropshire Chamber of Agriculture, of which he was for some few years Honorary Secretary.

In his own county, agricultural organisations for over half a century had in Sir Bowen one of their hardest workers. It must remain one of the many marvels in the life of this remarkable man that in addition to his services to agriculture in all parts of the country he found time to devote himself to some of the heaviest duties in local government work. He was for a quarter of a century Chairman of the Salop County Council, but for ten years before that he had been Chairman of the Atcham Board of Guardians. During his many years on that Board he did valuable work and his name became known throughout the Poor Law world for his able report, published in 1890, on the progress of the Atcham Union.

He will remain best remembered for his work in connection with the Shropshire County Council and all its kindred bodies. He was an original member of that body, and as an Alderman was on the Council up to his death. For five years he was vice-chairman under the first chairman of the Council, Mr. Alfred Salwey, and his successor, Mr. S. K. Mainwaring. On the death of Mr. Mainwaring in October 1895 Sir Bowen was elected Chairman, and continued to hold that office until 1919. During that time he gave himself unsparingly to the work of the county, acting as Chairman of the Finance Committee, a member of the Education and other committees. His desire was to retire from the chair a year or two before he did, but his sense of duty kept him at his post as Chairman right through the dark days of the Great War. It was that honest discharge of duty, going absolutely straight, solid as a man and with no axe to grind, that marked Sir Bowen all through his long service on the County Council.

It was an agreeable piece of news to his friends in the county and all over the country when in 1911 his name appeared in the King's Honours List as having been made a baronet for his long and eminent public services. The following year Sir Bowen publicly received, through the Lord-Lieutenant, the Earl of Powis, the congratulations of the county on the honour bestowed on him by His Majesty. Sir Bowen was presented with his portrait in oils, and this picture now hangs side by side with other eminent Salopians, in the Grand Jury Room at the Shire Hall.

Sir Bowen had many other activities. He was a J.P. and Deputy-Lieutenant for the county, and in his capacity as a magistrate was a regular attendant at the County Quarter Sessions and on the Grand Jury at the Assizes. During the days of the war he was a member of the County Appeals Tribunal, and put in many months of anxious work with the late Mr. Frank Bibby, chairman, and others, in the discharge of those distressing duties. As one of the founders of both the Harper Adams Agricultural College and the Radbrook Technical School for Girls, he always took the liveliest interest in them. He was a governor of both, and at Radbrook was a frequent visitor and friend. Sir Bowen was from its start Chairman of the Governors of the Priory Secondary School, Shrewsbury; he was a governor of the Wem and Cleobury Mortimer Grammar Schools, and was one of the Walker Trustees. Another body in which he was interested was the Royal Agricultural Benevolent Institution, and when some years ago he received from his agricultural friends a handsome presentation, which included a sum of £400, he generously handed over the money to the funds of the Benevolent Institution.

Sir Bowen had over the past two or three years dropped out of many of his public duties, so that the break of his going had been gradual. He had, nevertheless, to the last been much out and about, and his familiar and picturesque figure in Shrewsbury will long be missed by those who saw him so often.

His remains were laid to rest on Tuesday, June 9th, by the side of his wife, in the family vault at Montford Churchyard. In the church are memorial windows both to Sir Bowen's wife and to her parents. A very large number of members of the County Council and representatives of public and agricultural bodies attended the funeral, including Mr. W. Bainbridge, representing Sir Gilbert Greenall, Bart., President of the Royal Agricultural Society, and Dr. Voelcker, consulting chemist to the Royal Agricultural Society.

Sir Bowen was an ideal chairman, firm but courteous, always acting with strict impartiality, and extremely anxious that every one should be given a fair hearing. He was a plodding, indefatigable worker, and he left no stone unturned that he should be master of his subject when he had any important matter to deal with. A man of distinction, he had a great charm of manner; he was naturally somewhat shy and reserved, but to his more intimate acquaintances he was a very lovable man and a staunch and loyal friend. I can think of no man in recent times who has played a more unselfish part in making the best use of his talents for the good of the general community.

In conclusion, I feel I have lost a very old and dear friend, with whom I had been intimately associated for nearly fifty years in an official capacity on many Associations in which he was a very active member. His sage advice and help were always most generously given, and I shall ever revere his memory as the best type of an English gentleman, which is the highest tribute that can be paid to any man.

ALFRED MANSELL.

HENRY SAGNIER.

Henry Sagnier, the great French agricultural journalist, died on October 15th, 1925, being over eighty years of age. During the early years of his life he displayed great interest in chemistry, but his real genius for journalism soon made itself apparent, and in 1868 he was appointed secretary to the French journal, *L'Agriculture*, and in due course became editor, a post which he held for twenty-four years. In 1909 that journal was amalgamated with the *Journal d'Agriculture pratique*, and M. Sagnier held the position of editor of the combined paper up to the day of his death. Throughout his life he exhibited a very great interest in agriculture, and travelled throughout France and also visited every other country in Europe in order to secure first-hand knowledge of the various problems which confronted the agriculturists there. He was ever ready to espouse the cause of the French farmer, and used the pages of his journal to voice the needs of the agricultural community. He was a firm believer in some form of protective tariff for agricultural produce, but was strongly opposed to State interference with farming practice. Though the task of editing the *Journal d'Agriculture pratique* made considerable calls upon his time and energy he yet found leisure for many other activities. He was a valued member of the Governing Committee of the French Association of Industry and Agriculture, and also sat for many years on the International Agricultural Commission at Paris, and was Permanent Secretary to *L'Academie d'Agriculture*, whose gold medal he was awarded in 1925 in recognition of his services. He published various agricultural works, the most important of which, *La Dictionnaire d'Agriculture*, had a very extensive circulation.

Henry Sagnier was elected an Honorary Member of the Society in March 1914.

F. M. B.

EUGENE TISSERAND

Another great French agriculturist, Eugene Tisserand, died in October 1925, at the great age of ninety-five. M. Tisserand's interest in agriculture made itself apparent at an early age, and in 1850 he entered the Agricultural Institute at Versailles, and later obtained a travelling scholarship which enabled him to spend five years visiting the chief countries in Europe in order to make a close study of the various agricultural conditions and practices. The first year of his tour, 1853, he spent in Great Britain. In 1858 he was made administrator of the State Agricultural Lands of France. A great deal of work was necessary in order to restore these lands to prosperity and to develop their hitherto unexplored resources; M. Tisserand proved himself fully equal to the task and in 1871 he was made Inspector-General of Agriculture for the Eastern Provinces. All this time his greatest interest lay in the extension of agricultural education and scientific research. He held that France's chief asset lay in her agriculture and that, especially after the *débâcle* of 1870, it was necessary to develop her resources to the utmost. From 1876–79 he was Director of the National Institute of Agriculture, which was re-started largely at his instigation, and in 1879 he became Director of Agriculture, a post for which he showed great aptitude and which he held till 1896, when he was called to the *Cour des comptes*. M. Tisserand was a prolific writer, and his books cover a wide field. He was elected an Honorary Member of the Society in 1883, at the same time as his friend and contemporary Louis Pasteur.

F. M. B.

The Control of the Hop Trade. The hop trade was the last of the industries, taken under Government supervision during the war, to be decontrolled. Control had necessarily been taken when the Government decided that in the interests of food production hops must be grubbed over large areas and food crops substituted. "The hop fields were ruthlessly sacrificed to grain production. . . . When hostilities ceased, it was found that the industry had suffered so acutely from conversion of acreage that only the closest safeguarding would effect a restoration to the normal growth. Foreign hops, therefore, had to be restricted throughout this period of contemplated nursing. The Hop Controller was a strong, silent man; no estimates were ever troubled with the cost of his administration. . . ."[1]

It is probably true to say that no controlled industry was managed with greater efficiency than the one over which Mr. G. Foster Clark presided, and the organisation which he set up, with the assistance of hop-growers and representatives of the trade, provided a lesson which was not lost upon farmers. They came to realise the value of combination for the conduct of marketing, and immediately upon decontrol growers representing no less than ninety per cent of the hop acreage of the country incorporated themselves, under the title of "*English Hop Growers, Limited,*" to carry on by voluntary association the operations effected through the Hop Control for so many years. The National Farmers' Union has taken an active part in the formation of the Society, and its career will be watched with much interest.

Farming Records and Accounts. By Spicer and Pegler. Pp. viii + 132. Messrs. H. F. L. (Publishers), Ltd., London. 10*s.* 6*d.*

If it be true that farmers are bad book-keepers it is not for lack of textbooks on the subject. New books on farm accounts appear with almost clock-work regularity. In the volume under notice Messrs. Spicer and Pegler advocate a costing system, and the descriptive matter and the examples given seem adequate to enable anyone with a knowledge of the principles of double-entry book-keeping to ascertain the costs of his farming operations. On the other hand, there is nothing very new in the book, which, in fact, seems to owe a considerable unacknowledged debt to earlier publications on the same subject.

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[1] *A State Trading Adventure,* F. H. Coller, C.B., p. 254.

A System of Book-keeping for Agricultural Estates. Prepared jointly by the Central Landowners' Association, the Surveyors' Institution, and the Land Agents' Society. Pp. 17. 2*s*. 6*d*.

To quote from the introduction to this pamphlet: "No attempt is made in this pamphlet to deal with the general principles of book-keeping, a knowledge of which can be obtained from the textbooks published on the subject. The aim has been to describe the simplest and most satisfactory method of recording receipts and expenditure as applied to Estate management, especially for the smaller Estates, where the work is undertaken by a small staff, or by the owner himself. Where larger staffs are available, and where it is desired to show results in greater detail (e.g., apportioning expenditure against each holding), subsidiary books may be added as required."

Skeleton forms of account with specimen entries are provided, and one of the main objects of the pamphlet is to introduce greater uniformity into the practice of estate book-keeping. It is published with high authority and can be recommended for careful study. But, whilst not forgetting that the pamphlet is intended to reach those who should be very familiar with book-keeping processes and to whom any detailed description of principles should be unnecessary, some regret may be expressed that the opportunity of this publication was not taken to treat the subject at considerably greater length. Even though this were unnecessary in the case of the practising land agent, or of the landowner directly concerned with estate management, it would have added very much to the usefulness of the work for the estate pupil and the student of land agency.

THE CHESTER SHOW, 1925.

CHESTER, where the eighty-fourth "Royal Show" took place from the 7th to the 11th July, had twice previously received visits from the national Agricultural Society. The first occasion was in 1858, and it was not until the show of that year, the twentieth of the series, that the annual event began to yield a surplus of receipts over the expenditure to the Society. The City was again visited in 1893, when there was a most successful Meeting, notwithstanding the somewhat uncertain nature of the weather during the week of the Show.

Particulars of entries, numbers of admissions and financial results of the three Chester Meetings are tabulated in the following statement.

Year	President	Implements etc. entered	Entries of Live Stock	Persons paying for Admission	Financial Result
					£
1858	6th Earl Berners . . .	3,648	1,026	62,539	+1,119
1893	1st Duke of Westminster .	5,527	2,059	115,908	+2,404
1925	Sir Gilbert Greenall, Bart., C.V.O.	2,752*	3,922	112,880	+ 345

* Certain Exhibits not now numbered.

Cordial co-operation and assistance was rendered by the Cheshire Agricultural Society, who withheld their County Show for the year. In return, members of the Cheshire Society were accorded similar privileges to those enjoyed by members of the parent Society.

The showground at Saltney was 160 acres in extent, or one of the largest, if not the largest, ever occupied by the Society. Seventy acres sufficed for the 1893 function, and 25 acres for that held in 1858.

A special siding, adjoining the showyard, was constructed by the Great Western Railway Company, with docks, cranes, etc., for the purpose of dealing with the show traffic, and a roadway from that siding, built also by the Company, gave direct access to the showyard for stock and implements consigned by the Great Western route.

Thanks, in a great measure, to the substantial contributions received from the Chester Local Committee, and the various horse, cattle, sheep, and pig Breed Societies, the 1925 Prize Sheet was a record one. Including Champion and Special prizes, and Medals, the total value offered for competition amounted to £16,411, as compared with £15,360 at Leicester in 1924.

Another record was set up in the Cattle section, where the number of entries (exclusive of "double" entries) reached 1,565, or 18 more than at Cambridge in 1922.

For the first time at the Royal show a classification was provided for Welsh Pigs.

A Summary Statement of Entries, Classes and Prizes is given for the shows of 1893 and 1925, together with the customary comparative statement of entries in the several sections over a series of years.

Much interest was aroused by the exhibit (not for competition) of Welsh Mountain Sheep by the University College of North Wales, Bangor, for the purpose of illustrating the genetical research work being carried on at that institution.

COMPARATIVE STATEMENT OF ENTRIES, &c.,
AT TWO SHOWS HELD AT CHESTER IN 1893 AND 1925.

HORSES, CATTLE AND GOATS.	1893		1925	
	Classes	Entries	Classes	Entries
HORSES :—				
Prizes . .	—	*£1,555*	—	*£4,448*
Shires	7	127	12	86
Clydesdales . .	7	51	8	38
Suffolks . . .	5	33	11	85
Percherons. . .	—	—	9	52
Agricultural Horses	3	12	—	—
Hunters—				
Breeding Classes	10	133	12	96
Riding Classes .	—	—	7	119
Polo and Riding Ponies—				
Breeding Classes	—	—	6	37
Hack and Riding Ponies . .	—	—	3	25
Arabs	—	—	1	3
Cleveland Bays .	2	9	—	—
Coach Horses . .	2	12	—	—
Hackneys . . .	7	63	4	14
Hackney Ponies .	2	20	3	10
Welsh Ponies . .	2	22	8	36
Shetland Ponies .	—	—	2	12
Children's Ponies .	—	—	3	32
Driving Classes .	2	27	13	92
Jumping . . .	—	—	4	121
Total for HORSES	49	509	106	858[1]
CATTLE :—				
Prizes . .	—	*£1,947*	—	*£6,048 10s.*
Shorthorn . . .	7	119	11	171
Hereford . . .	7	61	9	90
Sussex	6	31	5	27
Welsh	7	70	10	119
Longhorn . . .	—	—	4	16
Aberdeen Angus .	4	36	6	58
Dun and Belted Galloway . .	—	—	4	15
Galloway . . .	4	24	4	19
Park Cattle . .	—	—	2	20
Dairy Shorthorn .	—	—	11	239
Lincolnshire Red Shorthorn . .	—	—	7	51
Devon	6	36	6	16
South Devon . .	—	—	5	24
Red Poll . . .	6	31	6	104
Blue Albion . .	—	—	6	44
British Friesian .	—	—	11	207
Ayrshire . . .	2	7	4	25
Guernsey . . .	5	54	7	98
Jersey	6	152	7	103
Kerry	3	29	5	40
Dexter	3	19	5	70
Dairy Cattle . .	4	60	4	17
Milk Yield . . .	—	—	13	176
Butter Test . .	2	30	2	105
Total for CATTLE	72	759	154	1 754[1]
GOATS :—				
Prizes . .	—	—	—	*£110*
Inspection Classes	—	—	9	56
Milk Yield . . .	—	—	2	38
Total for GOATS	—	—	11	94[1]

SHEEP, PIGS, POULTRY, AND PRODUCE	1893		1925	
	Classes	Entries	Classes	Entries
SHEEP :—				
Prizes . .	—	*£1,105*	—	*£2,251*
Oxford Down . .	4	41	5	34
Shropshire . . .	5	189	6	56
Southdown . .	4	84	6	43
Hampshire Down .	4	33	5	36
Suffolk	4	18	6	50
Dorset Horn . .	3	12	3	6
Dorset Down . .	—	—	3	18
Wiltshire or Western Horn . . .	—	—	3	13
Ryeland . . .	—	—	5	39
Kerry Hill (Wales)	—	—	5	67
Lincoln . . .	4	36	6	53
Leicester . . .	4	36	4	31
Border Leicester .	3	34	4	7
Wensleydale . .	3	32	5	29
Kent or Romney Marsh . . .	2	3	6	46
Cotswold . . .	4	42	3	9
Devon	—	—	2	7
South Devon . .	—	—	4	21
Lonk	2	7	2	12
Swaledale . . .	—	—	4	13
Herdwick . . .	2	18	3	16
Exmoor Horn . .	—	—	—	—
Dartmoor . . .	—	—	—	—
Cheviot . . .	2	5	3	15
Blackfaced Mountain	2	11	2	15
Welsh Mountain .	4	30	6	61
Black Welsh Mountain	—	—	2	14
Total for SHEEP .	56	631	103	711
PIGS :—				
Prizes . .	—	*£432*	—	*£1,841*
Large White . .	4	24	8	149
Middle White . .	4	14	8	230
Small White . .	4	14	—	—
Tamworth . . .	4	35	6	38
Berkshire . . .	4	61	8	104
Large Black . .	4	14	8	142
Gloucestershire Old Spots . . .	—	—	8	46
Lincolnshire Curly Coated . . .	—	—	6	29
Cumberland . .	—	—	6	40
Wessex Saddleback	—	—	8	79
Essex	—	—	6	39
Long White Lop-Eared . . .	—	—	4	23
Welsh	—	—	3	13
Total for PIGS .	24	162	79	932
POULTRY :—				
Prizes . .	—	*£262*	—	*£479 10s.*
Entries .	94	836	106	970
PRODUCE :—				
Prizes . .	—	*£862*	—	*£643 10s.*
Butter	4	225	6	87
Cheese	19	568	19	412
Cider	4	24	3	20
Jams	6	10	—	—
Wool	—	—	19	93
Hives and Honey .	18	130	—	—
Total for PRODUCE	51	957	47	612

Grand Totals for LIVE STOCK, POULTRY, PRODUCE, &c.	**1893**	**346 Classes**	**3,854 Entries**	**£6,389 [2] Prizes**
	1925	**603 Classes**	**5,931 Entries**	**£16,572 10s. [3] Prizes**

[1] Animals exhibited in more than one class are here counted as separate entries.

[2] Including £130 for Implements, £64 for Butter Making Competitions, and £32 for Horse-Shoeing Competitions. [3] Including £300 for Horticulture and £300 for Dogs.

Entries of Live Stock, Poultry and Produce.

	Chester, 1925	Leicester, 1924	Newcastle, 1923	Cambridge, 1922	Derby, 1921	Darlington, 1920	Cardiff, 1919	Manchester, 1916	Chester, 1893
Horses . . .	658[1]	768[1]	641[1]	713[1]	601[1]	714[1]	569[1]	518[1]	509
Cattle . . .	1,565[1]	1,302[1]	1,185[1]	1,547[1]	1,254[1]	1,175[1]	867[1]	803[1]	759
Goats . . .	56[1]	60[1]	68[1]	61[1]	68[1]	143[1]	91	92	—
Sheep . . .	711	633	728	715	788	739	586	607	631
Pigs . . .	932	1,212	1,048	1,164	902	692	389	321	162
Total . .	3,922	3,975	3,670	4,200	3,613	3,463	2,502	2,341	2,061
Poultry . .	970	1,157	1,189	1,205	1,219	1,476	1,383	1,519	836
Produce . .	612	300	436	247	322	475	387	565	957

[1] Exclusive of Double Entries.

Shedding in Implement Yard (in Feet).

Description of Shedding	Chester, 1925	Leicester, 1924	Newcastle, 1923	Cambridge, 1922	Derby, 1921	Darlington, 1920	Cardiff, 1919	Manchester, 1916	Chester, 1893
	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet
Ordinary . .	3,985	4,145	4,280	4,450	4,595	5,410	4,540	3,300	8,610
Machinery . .	3,380	3,685	4,230	4,240	5,560	5,710	4,200	1,290	2,211
Special . . . (Seeds, Models, etc.)	3,575	3,867	3,392	3,501	3,835	3,374	2,469	2,480	2,197
Total . . . (Exclusive of open ground space)	10,940	11,697	11,902	12,191	13,990	14,494	11,209	7,070	13,018
No. of Stands .	438	455	453	494	508	471	371	239	408

The Poultry section, where the entries were not quite so numerous as in recent years, was open to the public from the Wednesday to the Saturday.

In the Produce department, the classification for Cheshire Cheese was considerably extended, the cash prizes being generously supplemented by grants from the Local Committee and the Cheshire Cheese Federation. In addition, the Cheshire Hunt provided two Champion Cups of the value of 100 guineas and 50 guineas respectively, with prizes of ten guineas and five guineas for the "reserve" champions. Competition for these cups was open to occupiers residing within the limits of the country hunted over by the Cheshire Hounds. Of the 412 entries in the Cheese section, 293 were in the classes for "Cheshires," and a most excellent exhibition they made.

Increased classification was provided for both competitive and non-competitive exhibits in the Horticultural section, and the display here surpassed even the splendid Flower shows seen in the "Royal" showyard on former occasions. Near the marquees of the Flower show, Messrs. Dicksons Nurseries, Ltd., laid out for the Society a half-acre plot demonstrating a practical scheme of fruit-tree planting likely to appeal to farmers and to smallholders.

The Cheshire County Council was responsible for another demonstration plot on such matters as grass mixtures, the treatment of pastures, the manuring of potatoes, and the destruction of charlock. Ancient and modern cheese-making equipment was also shown under the auspices of the Council, together with exhibits illustrative of the work of the Reaseheath School of Agriculture.

Recent research on Virus Diseases of Potatoes was illustrated at the stand of the University College of North Wales, Bangor.

Methods of producing "Clean Milk" were demonstrated daily by the staff of the National Institute for Research in Dairying.

Many exhibitors in the Implement section were supplied free of charge with electric power to drive their exhibits by the Electricity Committee of the Chester City Corporation. The Committee also staged in a large marquee a most interesting demonstration of the use and application of electric power for agricultural and domestic purposes.

Horse Shoeing Competitions were again a source of interest to many show visitors.

On the Thursday and Friday, a Championship Dog Show took place in the showyard. Challenge Certificates were granted for most breeds by the Kennel Club.

The rain that fell overnight before the opening of the show was the first in the district for about six weeks. By ten o'clock on the Tuesday morning, the rain had been followed by sunshine, which continued throughout most of the day, and the ground quickly dried. On the whole, judging was got through under very favourable conditions.

There were many visitors from the Continent and the Overseas Dominions present on the opening day, including a party of farmers from South Africa, who were then making a tour of the country and who were received by the President; Sir Gilbert Greenall also attended their luncheon and addressed them.

Fine weather continued on the Wednesday, when the show was honoured by a visit from the Society's Royal Patron. H.M. the King arrived at Knowsley on the previous evening, where he was the guest of the Earl and Countess of Derby. On the Wednesday morning, with members of the house party, His Majesty motored to Chester, and, on arrival there about noon, he left the car for an open carriage, in which he drove to the Royal Pavilion in the showyard. Here His Majesty was received by Sir Gilbert Greenall as President of the Society. The Working

Dairy was first visited and then the Cheese section, where Mr. Rowe Morris, Chairman of the Cheshire Cheese Federation, asked His Majesty's acceptance of a cheese from the exhibit by Mr. Charles E. Parton, of Haughton Hall Farm, Tarporley, who gained the Cheshire Hunt Champion Cup, value 100 guineas. The exhibitor and Mrs. Parton were afterwards presented to His Majesty.

After luncheon in the Royal Pavilion, the King made an extensive tour of the Show, during which he visited the pavilion of the Ministry of Agriculture and Fisheries, where he received a gift of a Dee salmon. A number of stands in the Implement Yard were visited, including that of the Oxford Institute of Agricultural Engineering, where a demonstration of artificial Crop Drying by the new implement patented there was in progress. Going on to the Cattle section, where animals had been specially parked, the Royal carriage was stopped for the King to see his own Red Poll Champion bull "Royal Crimson." Later, from the Royal box in the grand-stand, His Majesty watched a display of horse-jumping over the course in the large ring. After a visit occupying some five hours, His Majesty took tea in the Royal Pavilion and returned to Knowsley at 5.15 p.m.

The Royal Pavilion was then opened to the public for the rest of the week. Visitors were asked to place a donation in the collecting box at the door for the benefit of the Chester Royal Infirmary.

Brilliant sunshine continued on the Thursday, which brought the largest attendance of the week. Among the visitors was a party of between fifty and sixty farmers from Denmark. The Society's General Meeting of Governors and Members took place in the Large Tent at noon, and an item of special interest in the proceedings was the presentation by Major Robert Barbour (High Sheriff of Cheshire) of the Champion Cups for Cheshire Cheese. Resolutions were passed by the Governors and Members present cordially thanking the Mayor and Corporation for their hospitable reception of the Society, and also the Local Committee for all they had done to promote the success of the Show. The Hon. Director announced at this meeting that he would continue in that capacity as long as he was able and the Society so desired, although he would be ready to relinquish the office if and when a younger man came along.

On the night of Thursday rain again fell, but it stopped before the reopening of the Show and fine weather continued throughout the Friday and the Saturday. On the last day the exhibition was visited by several thousands of children from the schools in Chester and the surrounding neighbourhood.

The tables which follow show the numbers of admissions by payment at various hours on the several days at Chester, and also the total admissions at Chester in 1925, compared with the previous six shows and that at Chester in 1893.

Admissions by Payment at Chester, 1925.

Day of Show	11 a.m.	1 p.m.	3 p.m.	5 p.m.	Day's total
Tuesday (10*s.*) . .	1,183	2,700	3,212	3,335	3,352
Wednesday (5*s.*) (after 2 p.m., 3*s.*)	6,534	16,220	25,445	27,005	27,215
Thursday (3*s.*) . .	14,597	33,551	41,654	43,726	43,981
Friday (3*s.*) . .	8,111	15,408	19,190	20,559	20,682
Saturday (2*s.*) . .	4,357	8,851	14,096	17,375	17,650
Total for Show. .					112,880

Total Admissions at Chester in 1925, *compared with previous six Shows and Chester*, 1893.

Day of Show	Chester, 1925	Leicester, 1924	Newcastle, 1923	Cambridge, 1922	Derby, 1921	Darlington, 1920	Cardiff, 1919	Chester, 1893
First . . .	3,352	2,273	3,587	3,338	3,791	11,397	8,466	2,397
Second . .	27,215	16,204	37,926	21,880	33,979	51,479	45,096	20,959
Third . . .	43,981	35,347	63,183	31,903	33,931	52,626	68,838	19,034
Fourth . .	20,682	14,845	42,457	21,408	31,777	40,389	36,292	59,555
Fifth . . .	17,650	16,862	39,357	13,823	22,350	27,001	33,002	13,664
	112,880	85,531	186,510	92,352	125,828	182,892	191,694	115,908[1]

[1] Including 299 on preliminary "Implement" Day.

The Society is indebted to the officials and Executive Committee of the Chester Local Committee for all the arrangements made for the reception of the Show.

Neither trouble nor expense had been spared in the preparation of the ground. Every one had worked hard, and the Local Fund collected to meet the expenses of this Committee was, I understand, a record one.

Sir Gilbert Greenall, the President, was also Chairman of the Executive Committee, and was instrumental, not only in obtaining funds for the Committee, but in saving expenditure upon the site owing to his knowledge and experience of Royal showyards.

A concession greatly appreciated by members attending the Show was the restoration to them of the pre-war privilege of travelling to Chester at the reduced rate of single fare and a third for the return journey.

For general "smooth working" I think it can be said that the Chester Show has never been equalled. It has certainly not been surpassed.

T. B. TURNER.

16 Bedford Square,
London, W.C.1.

REPORT ON THE TRIALS OF SUGAR-BEET ROOT LIFTERS HELD AT NEWARK ON OCTOBER 13, 1925.

FOR many years, the trials of agricultural implements have formed one of the activities of the Royal Agricultural Society. The Great War put a stop to them for a time, but in 1920 trials of Motor Tractors and Ploughs were organised and early in 1924 the Implement Committee recommended that trials should be held for Sugar-Beet Lifting Machines. The past few years have seen rapid strides in the introduction of sugar-beet as a rotation crop in our arable districts. Great impetus has been given to this development by the Sugar Beet Subsidy Act of 1925. By the end of this year, ten modern Beet Sugar factories were in operation dealing with the crop from approximately 60,000 acres. As the new factories are tuned up to concert pitch, they will be able to deal annually with 10,000 or 12,000 acres of sugar-beet apiece, while a number of additional factories are projected which will greatly increase the demand for this crop.

The principal obstacle which the farmer finds in introducing sugar-beet into his system of cultivation is the difficulty of lifting the roots. The sugar-beet is a root of deep growth, which can only be pulled by hand in the very lightest soils. Experience has shown that any portion of the root which is above the surface is not only deficient in sugar content, but contains acids which are undesirable in the manufacture of sugar. On this account, the sugar factories require the whole of the crowns to be removed before the roots are delivered. The labour involved in these two processes of lifting a deeply embedded root, and cutting off the crown, is considerable. Many farmers have been deterred from sugar-beet cultivation on an extensive scale owing to the difficulty of finding sufficient seasonal labour for this purpose.

With these considerations in mind, the Implement Committee realised the importance of encouraging the invention and manufacture of labour-saving machines to meet the sugar-beet growers' requirements, and obtained the support of the Council for trials to be held in October, 1925.

Entries were invited for two classes:—

1. For machines which top and lift the roots, and separate them from the leaves and crowns.
2. For machines which loosen the roots, leaving them to be subsequently lifted and topped by hand.

For Class 1, prizes of £50 and £20 were offered, and for Class 2 prizes of £20 and £10.

The following points were laid down, to which the special attention of the Judges would be directed:—

1. Price.
2. Simplicity in design and working.
3. Draught.
4. Ease of handling.
5. Ease in turning.
6. Efficiency in lifting or loosening the roots.
7. Freedom from damaging roots.
8. Effective separation of leaves and crowns from root.
9. Facilities of subsequent collection of crop.
10. Time occupied in execution of work.

It was decided to limit the entries to British-made machines, in anticipation that British manufacturers would study the various types of sugar-beet lifting machines employed abroad, and would either design improved machines of their own, or arrange to manufacture foreign patents on licence. Events proved that this anticipation was not justified. Only one entry was received for Class 1, and this machine proved to be crude and inefficient. It is a matter for regret, in view of the rapid growth of sugar-beet cultivation in this country, that British manufacturers have not seen their way to produce efficient lifting and topping machines.

Class 2 attracted seven entries, including a cable-drawn lifter which takes six rows simultaneously, and six pair-horse machines, including side and centre lifters, each dealing with a single row.

Arrangements were made with Home Grown Sugar, Limited, for the trials to take place on the Kelham Estate, near Newark. The Estate Manager, Mr. S. Colyer, and Mr. Tracy P. Fowler, Manager of the Cantley Factory of the English Beet Sugar Corporation, Limited, were nominated as Judges. Admirable arrangements for the trials were made by Mr. Colyer, who also provided seven pairs of draught horses, accustomed to work of the kind required, for use with the horse-drawn machines. It was arranged that all the machines entered should be tested on both light and heavy soil. The trials were held on October 13. Colonel E. W. Stanyforth, Chairman of the Implement Committee; Sir George Courthope, Steward of Implements; Mr. T. B. Turner, the Secretary; and Mr. F. S. Courtney, the Consulting Engineer, were present to conduct the trials.

In spite of most unpleasant weather, there was a large attendance of farmers and other interested people, including a party of prominent Dutch farmers and the Professor of Agricultural Machinery at the University of Holland, who had come to England for the purpose.

As has already been stated, the only machine entered in Class 1 failed to satisfy the Judges, and no award was made in this class. Instead of cutting the crown cleanly from the root, this machine tore many of the roots. This was probably due to the fact that the topping blade was fixed too close to the lifter, with the result that the latter had loosened the root in the soil before the former had cut off the crown. Continental experience suggests that the topping blade must not be rigidly fixed to the frame or beam of the lifting machine, but should be carried on a spring, or flexible attachment, so adjusted that the blade moves evenly above the surface of the ground.

The problem of topping the roots mechanically at the same time as they are lifted, presents many difficulties, if it is intended to use the tops and crowns for feeding. On the Continent, considerable importance is attached to the feeding value of the tops, which are used both as green feed and as ensilage. In the latter case, they are frequently packed into the silo pits in alternate layers with wet pulp from the sugar factories. The ensilage produced has considerable feeding value, but is not likely to become popular in this country, owing to its strong and unpleasant smell, with which many of us became acquainted in Flanders during the war.

In Holland the experiment is being tried of harvesting the tops and crowns before the roots, so that the former can be removed as free from dirt as possible. In this country it is usual to plough in the tops and crowns as green manure. Wherever this practice prevails, it is obviously more important to save time and labour in the lifting of the crop than it is to keep the tops and crowns free from dirt. It would seem, therefore, that there is a real opening in England for a machine which will top and lift the roots in a single operation. It is hoped that the skill and enterprise of British machinery manufacturers will produce a satisfactory implement for this purpose.

With regard to Class 2, several of the lifting machines competing did their work well, loosening the roots without displacing them unduly or covering them with loose soil. This is an important point in view of the subsequent operation of topping, which is usually carried out as follows:—One man draws the loosened roots from the ground, holding one in each hand, beating them together to remove loose earth, and placing them in small heaps ready to be topped by a second man, who follows with a heavy knife, with which he chops off the whole crown of the roots, leaving the tops and crowns on one side of him—his right, if he is right-handed—and throwing the roots into heaps on the other side, i.e., his left.

By working up one row and back down the next, he leaves the roots from two rows in a single line of heaps, thus facilitating the loading into carts.

At the commencement of the Trials, the Judges expressed the opinion that the cable-drawn machine, entered by Messrs. John Fowler & Co. of Leeds, should not be judged in competition with the horse-drawn machines. After consultation between Colonel Stanyforth and the Steward, it was decided that a Special Prize might be awarded to the cable-drawn lifter, in the event of the Judges recommending an award. This machine did excellent work on medium and light soil, loosening six rows of roots simultaneously without unduly disturbing the surface, or moving the roots from their position. On heavy soil, while loosening all the roots, it disturbed the ground considerably, leaving a rough surface which would add somewhat to the cost of carting off the beet crop. Its working cost is estimated at 15*s.* to £1 per acre inclusive, which exceeds that of the horse-drawn lifters by probably 50 per cent. On the other hand, it possesses the great advantage of saving time and labour materially, and by raising and loosening the soil to a depth of over one foot, it reduces the cultural operations required for the following crop. The Judges recommended this machine as being deserving of a first prize, and a special prize of £20 was, therefore, awarded to Messrs. John Fowler & Co.

Of the horse-drawn machines, the side lifters showed distinct superiority over the centre lifters, both on light and heavy soil. The centre lifters are apt to become blocked with the tops of the beet, and to break and drag the roots together, thus rendering the subsequent topping operations more difficult.

After all the machines had been demonstrated by the firms entering them, three side-lifting machines were selected by the Judges, and were further tested by being drawn by the same pair of horses and driven by Mr. Colyer personally, and his Foreman. This test was repeated on both light and heavy soil.

On the recommendation of the Judges, the first prize was awarded to Messrs. John Cooke & Sons' side-lifting machine. This machine, of which the price is £5 15*s.*, did excellent work, was light in draught, and was easy to handle.

The second prize was awarded to Messrs. G. Stephenson & Sons' side-lifting machine, the price of which is £4 15*s.* In this machine, the cutting and shelving surfaces, and the consequent friction, are reduced to a minimum. It loosens the root effectively without disturbing its position, or unduly moving the soil. In this respect, it performed even better work than the machine to which the first prize was awarded, but it is not nearly so easy to manipulate, owing probably to the fact that it is fitted with only one leading wheel instead of two, as in the case of the other machines. On this account it was not awarded first place. It was the lowest priced machine entered in the trials, and is well within the reach of the smallest grower.

The reserve position was awarded to Messrs. J. & F. Howard's side-lifting machine. This machine, which is priced at £7, is a well-made two-wheeled machine, but is inferior to the first and second prize-winners in draught, quality of work, and price. In heavy soil, too much disturbance of the surface takes place, and the draught increases considerably. This is probably due to the fact that the share, or side attachment, which comes in contact with and loosens the beet roots, is unnecessarily large.

The trials attracted a good deal of notice, and, although the entry in Class 1 was most disappointing, there is little doubt that a useful purpose has been served, which will more than justify the trouble and expense incurred by the Royal Agricultural Society.

G. L. C.

AGRICULTURAL MACHINERY AT THE CHESTER SHOW, 1925

THE exhibition of agricultural machinery at the Chester Show demonstrated the capacity of manufacturers to improve existing farm implements and mechanical methods and to make use of the sources of power now available to industry. We do not always realize what a place the internal combustion engine has in agriculture and it needs such an assemblage of power-driven machinery as that at Chester to bring home to us what the internal combustion engine now does for us and what more it may do. A very large proportion indeed of the stands shewed one or more small petrol engines installed, coupled up to lighting sets or driving stationary machinery or doing other useful work : elsewhere, of course, tractors were in evidence. There are now few departments of farming in which there is no place for the internal combustion engine, and there is no evidence that the limits of its usefulness have yet been reached. How wide those limits may be is suggested by the railway centenary which was celebrated this year : in another seventy years or so our descendants may be celebrating the centenary of the petrol engine and pointing to achievements greater even than those of steam.

But a very ancient form of power is again claiming attention. Windmills after falling into disrepute are now finding favour with designers who claim that in windmills built upon new models an efficient source of power may be found. Such claims cannot be adequately judged or tested under the conditions of a Show : a test demands long and patient measurements and a wide consideration of alternative sources of power. One windmill, the "*Aggrico*" *Windmill Plant*, was entered for the Society's medal, and although it did not receive an award some detailed account of it is desirable.

The "Aggrico" Windmill Plant (Young, Osmond and Young, Ltd., Stafford House, Norfolk Street, Strand, London, W.C.2) is designed for ready adaptation to either pumping or the generation of electricity. It has several quite novel features, the semi-streamlining of the blades and the methods of regulation being prominent.

The structural part of the plant consists of a lattice-built steel tower, 55 feet high, and is of sound construction throughout. An ample wooden platform, surrounding the tower about 12 feet from the top, facilitates any work on the headpiece or the windwheel, and is reached by a steel ladder, carried up the framework of the tower.

The heaviest single piece in the plant is the headpiece, which weighs about 1,400 lb. and has to carry the rudder mechanism and the governing gear, as well as the windwheel itself. This headpiece is of girder construction, carrying at one end the main shaft and governing gear, and at the other the rudder gear and a concrete block as balance weight. At the centre is the bevel gearing to the transmission shaft. With a suitable block and tackle, however, the headpiece can be raised into position by six or eight men in a very short time : all the other constructional work can be done by two or three men.

The blades of the "Aggrico" mill are hollow, the covering being of thin galvanized metal, and are streamlined in cross-section. The end of each blade, however, is cut squarely off and has fixed to it a sheet-metal stamping, of the same shape as the cross-section of the blade, but overlapping all round. This device is intended by the designers to prevent loss of power due to air escaping at the ends, before imparting its maximum energy to the blades. These blades are made in standard sizes, and the power required from any mill is obtained by fitting the requisite number of blades. The 5 k-w size is fitted with five blades, the diameter of the wheel being 22 ft. The wheel, after the blades have been mounted separately, is braced by tie-rods from blade tip to blade-tip and from the blade-tips to a projection of the main shaft.

The methods of governing and regulating the output are novel. Fixed to each blade and running lengthwise inside it is a steel tube or spine. Inside this spine is a spindle, which is fixed at one end to the main shaft and at the other bears on the extremity of the spine, where a ball-bearing is fitted. Thus, while the wheel is turning in a vertical plane, each blade is free to turn on a radial axis. Round the spine and at its inner end is fitted a pinion which engages on a rack in a bush, which slides on the main shaft. As this rack is moved out or in it turns the spine, and with it the blade, until the desired position is reached. The regulation is controlled from the foot of the tower by means of a lever, which operates the rack through a rod and crank arrangement. By this means can be obtained any position of the blades from a point where the maximum advantage is taken of the wind to a position where the edge of the blades is presented to the wind, and there is therefore no rotation.

The blades are so proportioned, that the pressure of the wind tends to turn them on their own axes. This turning tends to move forward the rack, and, by hanging a weight on the lever, this movement is prevented until the wind is high enough to raise the weight. Thus, by hanging different weights on the lever, any degree of automatic governing is obtained and the blades will turn out of the wind at any predetermined load on the machine.

Another feature to which attention may be drawn is the method of keeping the wheel in the wind, an object usually attained by means of a rudder-vane or tail. Mounted on the rear end of the headpiece, and in two parallel vertical planes, at right angles to the plane of the main wind-wheel, are two small five-bladed windmills. These are connected together and drive, through gearing, a worm, which engages in a fixed toothed ring on the main framework. As these windmills work they gradually pull round the whole headpiece, until the rudder mills are out of the wind and the main wheel fully in it. Suspended from the headpiece and rotating with it is a steel ladder, which permits of easy access from the platform to the gearing and the mechanism on the head.

A generator is situated at the base of the tower, on a concrete foundation; the bottom section of the framework is built in to form a hut which will house the generating plant and the storage batteries. Transmission from the wheel is by a vertical steel shaft. There is a bevel gearing at each end of the shaft, and a set of spur gearing to the generator. The triple reduction gearing gives a ratio of 25 : 1, the generator running at 650–1300 R.P.M. The vertical shaft is steadied at intervals, by means of wooden guide blocks.

This plant, especially in regard to electrical features, has much to commend it in regard to the accessibility of all parts needing attention.

The most novel of all the implements submitted to the judges for the Society's medal was the *Crop Drying Plant* manufactured by the Geo. H. Gascoigne Co. of Reading. Again it should be emphasized that the conditions of a Show do not enable the judges to test the economic possibilities of an implement, but there can be no question that a plant on these lines will successfully dry crops and that a device of this kind (assuming that the expense is moderate) is much needed to deal with hay and corn crops in districts where the rainfall tends to interfere with natural harvesting. It is not too much to say that if it were found economical to adopt this system generally, there would be little short of a revolution in agriculture in this country and other parts of Europe, for the farmer would be to a large extent independent of the weather in the most critical period of the year. This implement was considered worthy of the award of the Society's medal.

Another implement to which a medal was awarded, also connected with hay harvesting, was the extremely ingenious device submitted by Blackstone and Co. of Stamford for an *Improved Drive for Grass Mowers.* This device the judges were able to test in a small way during the early morning in a neighbouring field. The essential feature of this device is that power is transmitted by a straight drive from the travelling wheels of the mower to the finger board, thus eliminating the connecting rod and bevel wheels which provide a constant source of weakness in other types of machine. If this system is proved to be successful in practice, there seems no reason why it should not be applied to mowing attachments to tractors and to binders.

Equally noteworthy was the *Power-Driven Binder* submitted by the International Harvester Co. of Great Britain, Ltd., 80, Finsbury Pavement, London, E.C.2, which also was awarded a medal. The essential feature of this device is that the power is applied direct from the tractor to the binder, instead of using the tractor as a substitute for a team of horses to haul the binder. The binder runs at a steady equal speed which is not altered in any way by the speed at which the tractor travels. Another distinct advantage is that the clutch can be taken out whenever the machine chokes and the load on the canvas cleared automatically.

Birtwisle and Co. of Northwich submitted a *Manure Distributor* to which also it was possible to give a short trial. It distributed artificial dressings very evenly in small quantities, and it contains an excellent feature in the extreme accessibility of the distributing gear for cleaning, since the whole can be removed in a few moments without trouble. This machine well deserved the medal awarded.

The *Mole' Draining Hand Apparatus* submitted by John Fowler and Co., Ltd., of Leeds, attracted a great deal of attention. This device is an ingenious combination of the mole drain and tile drain. A mole is first drawn in the usual way and pits cut at intervals. In these pits a hand-power ram is introduced for the purpose of inserting pipes in the mole. The leading pipe is fitted with a removable torpedo-shaped nose to clear any possible obstruction and to avoid clogging. There can be no question of the ingenuity of this implement; but it should be noted that only a comparative field test could determine what economic advantage this system possesses over others. It appears obvious, however, that as compared with the heavy expense to-day of cutting trenches and pipe laying, a system which employs mole-drains must be substantially cheaper.

The judges had no hesitation in awarding for this implement one of the Society's medals.

It will be thus seen that five medals were awarded. This was an unusually large number, but the entries were of unusual interest. The medals were awarded only to implements embodying absolutely new ideas. It does not follow that those to which no medal was awarded did not possess very considerable merits: but they did not in the judges' opinion possess the high qualification entitling them to an award.

Special mention has already been made of the Power Wind Plant submitted by Young, Osmond & Young, to which the judges would have been inclined to make an award had it been more distinctly agricultural in character. Attention may be drawn also to the Potato Digger, submitted by John Wallace & Sons, Ltd., of Glasgow; here the novel feature was a device for cleaning and removing the spuds on the wheels. This device might well be applied to other land machinery where spuds are needed. E. H. Bentall and Co., Ltd., of Maldon, submitted an *Ensilage Cutter* which was well adapted for ensilage as grown in this country, and avoided the tendency to pulping shewn by some machines from overseas: this machine can also be adapted for cutting chaff. Both Martin's Cultivator Co., Ltd., and Bamfords Ltd. submitted implements on the same lines which *combined the Swath Turner and Side Delivery Rake:* both were excellent, but they were regarded rather as improvements on existing machines than essentially new implements. Otherwise the judges would have found difficulty in refusing them an award. A highly ingenious and efficient *Trailer* was exhibited by the Eagle Engineering Co., Ltd., of Warwick: the mechanical device for tipping and disposing of the load was admirable, but it was rather a contractor's than a farmer's implement. A *Petrol Engine* submitted by R. A. Lister & Co., Ltd., of Dursley, was remarkably cheap and efficient and would admirably serve the purposes of many farmers, but not being specifically agricultural and not being essentially new it was not awarded a medal. The last implement entered to which reference should be made is the Cream Separator exhibited by the Melotte Separator Sales Co., Ltd., of Bristol. This separator reaches a high level of efficiency: it is simple and far less complicated than earlier designs and is consequently very easy to clean.

In reviewing the exhibits and awards made, it is difficult for a judge not to feel that some more searching test of new implements is desirable than that which is possible in the conditions of a show. However wide the experience of the judge and however ingenious he may be in devising partial tests, he cannot collect the data which would enable him to say that an implement to which an award is made will meet, more adequately than existing implements, the practical needs of the farmer. It would be interesting to know how many new implements awarded medals in past years have established themselves in agricultural practice. It is to be feared that the percentage would not be very high. Nothing like a 100 per cent. is to be expected under any system. But a practical and comparative test of all competing implements which pass a preliminary examination should be possible to devise, and the Society's awards would then possess an even higher value than they have to-day.

THOMPSON CLOSE.

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REPORT OF THE STEWARD OF DAIRYING, CHESTER SHOW, 1925.

MILK YIELD TRIALS

(CATTLE, CLASSES 241–253).

OUT of a record entry of 176 for the milk yield trials at Chester 124 cows were present, all with one exception going through the trials, the one cow being certified by the Society's Veterinary Inspector as too unwell to compete.

The cattle were milked out on Wednesday evening, July 8, the milk of the next 24 hours being taken for the trials.

Samples of milk were taken both morning and evening to ascertain the percentage of fat.

Out of the 123 animals 30 gave milk showing less than 3 per cent. fat on the average of the two milkings, while 31 would have been disqualified in addition to the 30 had the disqualification been enforced on each separate milking.

The numbers and breeds of the cows who gave milk showing less than 3 per cent. on the average of the two milkings are as follows :—

5	Shorthorns	out of	18	tested.
2	Lincoln Red Shorthorns	„	9	„
2	Red Poll	„	10	„
1	Blue Albion	„	4	„
18	British Friesians	„	26	„
1	Ayrshire	„	5	„
1	Dexter	„	11	„
30		„	83	„

Had the disqualification been enforced on each separate milking the numbers would have been more than double, as, omitting the cattle named above, 31 cows gave milk in the morning showing less than 3 per cent. fat although the deficiency in all these cases was made up by the good quality of the evening's milk. The breeds and numbers are as follows :—

8 Shorthorns.
7 Lincoln Red Shorthorns.
1 South Devon.
2 Red Polls.
4 British Friesians.
3 Ayrshire.
1 Guernsey.
1 Jersey.
3 Kerries.
1 Dexter.
—
31 in all.

Last year at Leicester the numbers disqualified were 43 out of 83; this year with the increased entries, 61 out of 123 tested showed a deficiency of fat at one of the two milkings.

The full report of the trials with the awards in each class is given in Table I, while the average figures of each breed are shown in Table II.

The Champion Prizes were awarded as below :—

A.—*For Cows of the Dairy Shorthorn, Lincolnshire Red Shorthorn, Devon, South Devon, Red Poll, Blue Albion and British Friesian Breeds.*

Champion Prize, £30.—1767 Bertram Parkinson's British Friesian, **Thurston Karels Emily.**

Reserve Number, £5.—1772 Friend Sykes' British Friesian, **Kingswood Ceres Daisy.**

B.—*For Cows of the Ayrshire, Guernsey and Jersey Breeds.*

Champion Prize, £20.—2037 F. B. Imbert-Terry's Jersey, **Blue Hayes Sporran.**

Reserve Number, £5.—2031 Mrs. Evelyn's Jersey, **Fairlawne Hussy.**

C.—*For Cows of the Kerry and Dexter Breeds.*

Champion Prize, £10.—2111 Kerry Estates Ltd. Kerry, **Valencia Eileen 3rd.**

Reserve Number, £5.—2108 Elmhurst Farming and Trading Co.'s Kerry, **Flora of Carton.**

Special Jersey Prize of £10 10*s*., given by the Royal Jersey

TABLE I.—MILK-YIELD CLASSES AT CHESTER, 1925.

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last Service	Total milk yield in 24 hours		Fat percentage	Points				Awards and Remarks
											Milk	Fat per-cent. × 4	Lactation	Total	
Class 241		*Dairy Shorthorns*	Lb.		1925		1925	Lb.	oz.						
1317	Sir Wm Hicking, Bart.	Lizzie Wild Eyes 2nd . .	1204	Mar. 21, 1916	May 20	50	—	53	4	3·35	53·25	13·40	1·0	67·65	H.C.
1324	Maurice & Ashton .	Preshute Pandora . . .	1687	Oct. 3, 1917	May 26	44	—	69	8	3·50	69·50	14·00	0·40	83·90	First Prize, £15.
1326	J. Pierpont Morgan	Hadnock Charming Lass 9th	1512	June 30, 1914	June 10	29	—	57	4	3·92	57·25	15·68	—	72·93	H.C.
1327	J. Pierpont Morgan	Kirklevington Lady 2nd .	1407	Apr. 12, 1917	Apr. 30	70	—	39	0	3·60	39·00	14·40	3·C0	56·40	—
1329	Lt.-Col. R. Mostyn-Owen	Dairymaid 3rd	1393	Apr. 4, 1914	June 8	31	—	58	8	3·10	58·50	12·40	—	70 90	H.C.
1336	Duke of Westminster	Dinah Winn	1344	Dec. 18, 1918	June 15	24	—	56	12	3·72	56·75	14·88	—	71 63	H.C.
1338	Capt. A. S. Wills .	Thornby Foggathorpe 2nd	1442	Sept.11, 1914	June 6	33	—	64	12	3·90	64·75	15·60	—	80·35	Third Prize, £5.
1339	Capt. A. S. Wills .	Thornby Foggathorpe 7th .	1386	June 3, 1917	June 12	27	—	63	12	3·67	63·75	14·68	—	78·43	Fifth Prize, £3.
1348	Mrs. E. M. Fitz-Hugh	Rosette Prim 4th . . .	1575	Feb. 17, 1919	June 17	22	—	64	0	4·27	64·00	17·08	—	81·08	Second Prize, £10.
1349	G. P. Golden . .	Lady Doreen 4th . . .	1547	Feb. 5, 1920	June 6	33	—	68	4	2·35	68·25	9·40	—	77·65	Fat below Standard.
1350	G. W. Isherwood .	Clara's Beauty 2nd . .	1309	June 12, 1920	—	—	—	45	12	2·85	45·75	11·40	—	57·15	Fat below Standard.
1355	J. Pierpont Morgan	Loughills Belle 2nd . .	1400	Jan. 13, 1920	June 1	38	—	57	12	3·12	57·75	12·48	—	70·23	H.C.
1358	Major S. P. Yates .	Rickerscote Foggathorpe .	1386	Jan. 25, 1920	May 28	42	—	66	12	2·95	66·75	11·80	0·20	78·75	Fat below Standard.
1360	Major S. P. Yates .	Sorbrook Foggathorpe . .	1505	May 15, 1920	May 28	42	—	63	0	3·97	63·00	15·88	0·20	79·08	4th Prize, £4.
1367	R. O. Hermon . .	Crook Foggathorpe 2nd .	1540	Jan. 26, 1921	June 3	36	—	46	0	3·02	46·00	12·08	—	58·08	H.C.
1375	H. P. Mortimer .	Princess Benedict 17th .	1302	July 28, 1921	June 6	33	—	41	12	3 60	41·75	14·40	—	56·15	—
1390	Major R. F. Fuller .	Chalfield Daffodil 7th . .	1218	Apr. 18, 1922	Mar. 15	116	—	40	12	2·42	40·75	9·68	7·60	58·03	Fat below Standard.
1400	Kingsclere Farms .	Anderson Bianca 6th . .	1295	Jan. 31, 1922	June 4	35	—	45	0	2·15	45·00	8 60	—	53·60	Fat below Standard.
Class 242		*Non-Pedigree Dairy Shorthorns.*													
1422	H. A. Brown . .	Isabelle	1372	Feb. 18, 1918	June 11	28	—	61	0	4·25	61·00	17·00	—	78·00	First Prize, £15.
1423	H. P. Mortimer . .	Lady Graceful	1477	—	June 21	18	—	51	12	3·97	51·75	15·88	—	67·63	Second Prize, £10.
Class 243		*Lincolnshire Red Shorthorns*													
1438	John Evens & Son .	Burton Opal 2nd . . .	1617	March, 1920	May 28	42	—	69	4	3·10	69·25	12·40	0·20	81·85	First Prize, £15.
1444	B. G. Bowser . .	Scothern Flower . . .	1407	Oct. 16, 1919	May 9	61	—	54	8	3·67	54·50	14·68	2 10	71·28	Fourth Prize, £4.
1445	B. G. Bowser . .	Scothern Sunset . . .	1526	Apr. 28, 1918	May 31	39	—	50	12	2·92	50 75	11·68	—	62·43	Fat below Standard.
1446	Chivers & Sons, Ltd.	Scothern Pansy . . .	1631	Apr. 27, 1919	May 3	67	—	71	4	2·25	71·25	9·00	2·70	82·95	Fat below Standard.
1447	Robert J. Clark .	Sharnford Lady . . .	1141	Oct. 21, 1921	June 17	—	—	41	4	3·60	41·25	14·40	—	55·65	—
1448	John Evens & Son .	Burton Cherry 4th . . .	1435	Sept.23, 1917	June 15	24	—	61	0	3·85	61·00	15·40	—	76·40	Second Prize, £10.
1449	John Evens & Son .	Burton Fillpail 6th . .	1638	March, 1918	June 18	21	—	53	4	3·10	53·25	12·40	—	65·65	H.C.
1451	Lt.-Col. Sir A. G. Weigall	Foston 80	1393	Oct. 18, 1921	Apr. 15	85	—	49	4	3·37	49·25	13·48	4·50	67·23	H.C.
1452	Lt.-Col. Sir A. G. Weigall	Langford Polly 5th . .	1428	Sept., 1914	May 28	42	—	61	0	3·55	61·00	14·20	0·20	75·40	Third Prize, £5.
Class 245		*South Devons*													
1503	Walter Hunt . .	Milkmaid 9th	1582	Sept. 2, 1916	Apr. 13	87	June 20	45	0	4·12	45·00	16·48	4·70	66·18	First Prize, £15.
1504	Walter Hunt . .	Milkmaid 10th	1820	Aug. 2, 1917	Mar. 2	129	May 29	40	8	4·15	40·50	16·60	8·90	66·00	Second Prize, £10.

TABLE I.—MILK-YIELD CLASSES AT CHESTER, 1925—*continued.*

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last Service	Total milk yield in 24 hours		Fat percentage	Points				Awards and Remarks
											Milk	Fat per cent. × 4	Lactation	Total	
Class 246		*Red Polls*	Lb.		1925		1925	Lb.	oz.						
1554	W. G. Clegg	Herontye Beryl	1120	Feb. 10, 1919	Apr. 19	81	—	33	12	3 20	33·75	12 80	4·10	50·65	—
1556	Co-operative Wholesale Society, Ltd.	Strensham Sage	1218	Apr. 12, 1919	Apr. 13	87	—	41	12	3·00	41·75	12·00	4·70	58·45	H.C.
1557	Viscount Folkestone	Longford Ruby	1309	Aug. 19, 1915	Apr. 25	75	—	44	4	3·60	44·25	14·40	3·50	62·15	Third Prize, £5.
1559	Mrs. R. M. Foot	White Hill Blue Belle	1288	Oct. 16, 1921	June 2	37	—	31	0	3·97	31·00	15·88	—	46·88	—
1560	Mrs. R. M. Foot	White Hill Molly	1204	Aug. 26, 1919	Mar. 28	103	—	42	4	2·35	42·25	9·40	6·30	57·95	Fat below Standard.
1565	Major J. A. Morrison	Basildon Clara	1078	Apr. 3, 1920	June 21	18	—	47	12	3·45	47·75	13·80	—	61·55	Fourth Prize, £4.
1566	Major J. A. Morrison	Basildon Comfit	1302	May 9, 1921	Mar. 11	120	June 15	39	8	3·50	39 50	14·00	8·00	61·50	H.C.
1567	Major J. A. Morrison	Sudbourne Comfit	1351	Aug. 10, 1916	Mar. 27	104	June 25	59	4	3·32	59 25	13·28	6 40	78·93	First Prize, £15.
1568	Walter Scrimgeour	Tendring Floss 20th	1421	Oct. 1, 1916	May 1	69	June 30	55	0	3·17	55·00	12·68	2·90	70·58	Second Prize, £10.
1570	A. Carlyle Smith	Ashmoor Sorceress	1414	Aug. 17, 1918	May 10	60	—	63	0	2·75	63 00	11·00	2·00	76·00	Fat below Standard,
Class 247		*Blue Albions*													
1640	Lt.-Col. W. E. Harrison	Cliftonthorpe Royal	1323	—	June 22	17	—	45	8	3·60	45·50	14·40	—	59·90	—
1645	J. D. Seals	Pike Kate	1393	—	June 20	19	—	48	4	3·70	48·25	14·80	—	63·05	Second Prize, £10.
1646	T. H. Swire & Sons	Mount Kitty	1491	1918	June 5	34	—	64	12	4·25	64·75	17·00	—	81·75	First Prize, £15.
1647	T. H. Swire & Sons	Mount Sweetheart	1582	1918	June 10	·29	—	65	12	2·87	65·75	11·48	—	77·23	Fat below Standard.
Class 248		*British Friesians*													
1727	Lord Barnby	Beccles Cleopatra	1589	Sept.25, 1916	Mar. 27	104	May 29	78	8	2·75	78·50	11·00	6·40	95·90	Fat below Standard.
1728	Lord Barnby	Beccles Queen Anne	1631	Sept.14, 1916	Apr. 15	85	—	60	0	2·80	60·00	11·20	4·50	75 70	Fat below Standard.
1729	Lord Barnby	Crawley Topthorne 2nd	1400	July 28, 1919	May 30	39	—	69	4	2·95	69·25	11·80	—	81·05	Fat below Standard.
1731	Lt.-Col. C. W. Birkin	Lamcote Maryanah	1414	Apr. 17, 1920	May 25	45	—	59	0	2·75	59·00	11·00	0·50	70·50	Fat below Standard.
1733	A. & J. Brown	Hedges Bles Julian	1372	Dec. 10, 1919	May 24	46	—	90	4	2·70	90·25	10·80	0·60	101·65	Fat below Standard.
1735	A. & J. Brown	Hedges Gemke Brand	1330	Oct. 14, 1916	Feb. 24	135	June 19	73	8	2·72	73·50	10 88	4·00	88·38	Fat below Standard.
1738	Capt.J.Christie, M.C.	Terling Breeze 8th	1498	Aug. 11, 1918	May 25	45	—	75	0	2·85	75·00	11·40	0·50	86·90	Fat below Standard.
1742	J. P. Fletcher	Osmaston Jenny	1463	Feb. 19, 1916	May 29	41	—	97	0	2·00	97·00	8·00	0·10	105·10	Fat below Standard.
1745	F. W. Gilbert and G. Woodfield	Wychnor Kate	1024	Feb. 19, 1919	Apr. 20	80	—	73	4	2·45	73·25	9·80	4·00	87·05	Fat below Standard.
1750	Ernest B. Hall	Hales (imp. 1922) Rika	1407	Mar. 29, 1921	Feb. 28	131	—	53	12	3·35	53·75	13·40	5·00	72·15	Fifth Prize, £3.
1751	Stuart Heaton	Sudbourne Dairymaid	1715	Jan. 12, 1919	Apr. 9	91	—	60	8	2·50	60·50	10·00	5·10	75·60	Fat below Standard.
1753	G. Holt Thomas	Colton Sunray	1519	Oct. 31, 1918	Mar. 19	112	—	63	12	3·30	63·75	13·20	7·20	84·15	Third Prize, £5.
1756	J. B. & H. L. Jarmay	Bulkeley Colanthe	1484	Aug. 11, 1919	May 17	53	July 4	50	12	3·05	50·75	12·20	1·30	64·25	H.C.
1760	Mrs. S. Johnson	Coplow Doris	1239	Dec. 12, 1916	Mar. 31	100	June 16	58	0	2·62	58 00	10·48	6·00	74·48	Fat below Standard.
1762	Trustees of David Moseley	Thurston Ellen	1498	Apr. 26, 1920	June 14	25	—	59	4	3·20	59·25	12·80	—	72·05	H.C.
1763	F. & T. Neame	Macknade Elicit	1512	July 20, 1919	May 29	41	—	81	12	2·67	81·75	10·68	0·10	92·53	Fat below Standard.
1764	F. & T. Neame	Macknade Esther	1379	May 3, 1918	June 7	32	—	64	0	2·70	64·00	10·80	—	74·80	Fat below Standard.
1765	F. & T. Neame	Macknade Event	1295	May 29, 1918	Apr. 26	74	—	82	4	2·32	82·25	9·28	3·40	94·93	Fat below Standard.
1767	Bertram Parkinson	Thurston Karels Emily	1547	Dec. 5, 1920	June 17	22	—	74	12	3·30	74·75	13·20	—	87·95	First Prize, £15, and Champion, £30.

1768	G. B. Radcliffe	Tarvin Garland	1470	Mar. 6, 1917	June 5	34	—	72	0	2·92	72·00	11·68	—	83·68	Fat below Standard.
1770	Lord Rayleigh	Terling Trix 4th	1323	Nov. 22, 1917	Feb. 14	145	May 9	57	0	2·22	57·00	8·88	10·50	76·38	Fat below Standard.
1771	Walter B. Robinson	Felhampton Ariadne	1596	Nov. 20, 1918	May 14	56	—	86	0	1·62	86·00	6·48	0·46	94·08	Fat below Standard.
1772	Friend Sykes	Kingswood Ceres Daisy	1400	Nov. 21, 1919	Feb. 5	154	—	61	8	3·00	61·50	12·00	11·40	84·90	Second Prize, £10, and Reserve for Champion, £5.
1774	W. & R. Wallace	Bladen Katy Did	1337	Feb. 10, 1919	June 22	17	—	66	4	3·07	66·25	12·28	—	78·53	Fourth Prize, £4.
1775	W. & R. Wallace	Winnings Aeum	1407	Apr. 11, 1917	Apr. 1	99	June 18	57	12	2·82	57·75	11·28	5·90	74·93	Fat below Standard.
1786	F. O. Hellyar	Knebworth Dawn Mist	1750	Sept.17, 1922	Apr. 26	74	—	30	0	3·32	30·00	13·28	3·40	46·68	—
Class 249		*Ayrshires.*													
1878	Major C. R. Dudgeon	Cargen Holm Daisy 4th	1043	Nov. 2, 1917	Apr. 6	94	—	42	8	3·20	42·50	12·80	5·40	60·70	H.C.
1879	Major C. R. Dudgeon	Cargen Holm Miss Robb 7th	931	Mar. 29, 1918	June 6	33	—	57	8	3·00	57·50	12·00	—	69 50	Third Prize, £5.
1881	James Howie	Friendlesshead Blossom 4th	1225	April, 1913	June 12	27	—	58	12	3·17	58·75	12·68	—	71·43	Second Prize, £10.
1885	A. W. Montgomerie	Beuchan Rosie 5th	1078	Oct. 24, 1917	June 16	23	—	63	12	3·05	63·75	12·20	—	75·95	First Prize, £15.
1887	Jacob S. Murray	Dolgig Keepsake	1260	Mar., 1920	May 31	39	—	63	0	2·75	63·00	11·00	—	74·00	Fat below Standard.
Class 250		*Guernseys.*													
1928	W. A. Argent	Flora's Buttercup of the Fountain	1057	Dec. 16, 1918	May 22	48	—	36	4	3·55	36·25	14·20	0·80	51·25	—
1929	A. Chester Beatty	Calehill Golden Lady	896	July 27, 1920	Mar. 7	124	—	26	12	4·80	26·75	19·20	5·00	50·95	—
1930	A. Chester Beatty	Golden Queen of Goodnestone	1190	Aug. 31, 1916	Apr. 10	90	June 19	40	8	4·37	40·50	17·48	5·00	62·98	H.C.
1932	George Blight & Son	Tregye Cora	875	July 23, 1912	Apr. 20	80	June 29	38	4	4·27	38·25	17·08	4·00	59·33	H.C.
1935	Walter Dunkels	Starlight Broom	1085	Apr. 20, 1919	June 3	35	—	56	8	4·57	56·50	18·28	—	74·78	First Prize, £15.
1937	Mrs. J. E. Ellis	Rowanberry 31st	1148	Apr. 11, 1920	June 15	24	—	50	0	3·75	50·00	15·00	—	65·00	Fifth Prize, £3.
1938	E. Jenkins	Boscarne Butter Queen	1022	Feb. 2, 1920	Apr. 30	70	—	26	12	5·55	26·75	22·20	3·00	51·95	—
1939	Mrs. J. E. Kirby	Dawn of Meadow View	896	Nov. 28, 1920	June 10	29	—	51	12	4·75	51·75	19·00	—	70·75	Second Prize, £10.
1941	Messrs. C. Norman	Hadham Snowdrop	959	Apr. 25, 1920	Mar. 7	124	—	35	8	3·75	35·50	15·00	5·00	55·50	—
1944	Sir James Remnant, Bart., M.P.	Dene Lady Hester	945	May 24, 1920	Mar. 27	104	—	50	8	3·40	50·50	13·60	6·40	70·50	Third Prize, £5.
1946	Samuel Semmens	Trevarthian Favourite	994	Feb. 20, 1918	Apr. 5	95	July 2	46	8	4·60	46·50	18·40	5·50	70·40	Fourth Prize, £4.
1950	A. Chester Beatty	Calehill Princess 2nd	833	Oct. 11, 1922	Feb. 12	147	May 27	25	0	5·00	25·00	20·00	8·00	53·00	H.C.
1959	Mrs. F. H. T. Jervoise	Herriard Dora 3rd	931	Mar. 23, 1921	May 18	52	June 28	32	0	4·07	32·00	16·28	1·20	49·48	—
1961	Col. the Hon. Geoffrey Lawrence, K.C.	Beatrix of Orpington	917	Jan. 6, 1922	May 22	48	—	29	4	4·00	29·25	16·00	0·80	46·05	—
1962	Messrs. C. Norman	Hadham Marigold 4th	1036	Mar. 17, 1921	May 23	47	—	44	12	3·70	44·75	14·80	0·70	60·25	H.C.
1963	William Roach	Saint Ela	959	Apr. 5, 1921	Apr. 15	85	July 4	27	12	4·55	27·75	18·20	4·50	50·45	—
1965	Mrs. F. Sainsbury	Downe Pearl 3rd	1099	Nov. 12, 1921	June 10	29	—	23	4	4·95	23·25	19·80	—	43·05	—
Class 251		*Jerseys.*													
2024	Mrs. Harry Briggs	Petune's Victory	810	Aug. 26, 1918	May 11	59		39	8	3·12	39·50	12·48	1·90	53·88	—
2030	George Cross	Roberta Star 2nd	840	Oct. 15, 1920	Apr. 10	90	—	35	4	3·65	35 25	14·60	5·00	54·85	H C.
2031	Mrs. Evelyn	Fairlawne Hussy	1090	Aug. 8, 1916	Feb. 4	155	May 28	49	0	4·97	49·00	19·88	8·00	76·88	Second Prize, £10, and Reserve for Champion, £5.
2034	Col. L. G. Gisborne, C.M.G.	Belle Farineuse	826	Mar. 30, 1920	Feb. 2	157	Apr. 12	22	4	4·95	22·25	19·80	11·70	53·75	—
2035	Col. L. G. Gisborne, C.M.G.	Sweetbread 50th	819	Aug. 5, 1919	Jan. 22	168	Apr. 14	29	8	4·20	29·50	16·80	12·00	58·30	H.C.

TABLE I.—MILK-YIELD CLASSES AT CHESTER, 1925—*continued.*

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last Service	Total milk yield in 24 hours		Fat percentage	Points				Awards and Remarks
											Milk	Fat per-cent. × 4	Lactation	Total	
Class 251		*Jerseys—continued.*	Lb.		1925		1925	Lb.	oz.						
2037	F. B. Imbert Terry	Blue Hayes Sporran	931	Dec. 16, 1917	Feb. 13	148	May 20	52	8	5·35	52·50	21·40	8·00	81·90	First Prize, £15; Special R.J.A.S., £10 10*s*., and Champion, £20.
2042	L. E. Tubbs	Glenny	791	June 26, 1918	June 9	30	—	31	4	4·40	31·25	17·00	—	48·85	—
2044	L. E. Tubbs	Queen Elizabeth	896	Jan. 12, 1916	Mar. 15	116	June 15	23	0	6·52	23·00	26·08	7·60	56·68	—
2045	R. Bruce Ward	Miranda's Lass	819	Nov. 5, 1919	Mar. 10	121	June 21	39	0	4·25	39·00	17·00	8·00	64·00	H.C.
2046	R. Bruce Ward	Pirouette	938	Apr. 3, 1920	May 19	51	—	51	12	4·30	51·75	17·20	1·10	70·05	Fourth Prize, £4.
2047	R. Bruce Ward	Privet	812	May 3, 1920	Mar. 17	114	—	37	8	4·95	37·50	19·80	7·40	64·70	Fifth Prize, £3.
2050	Grosvenor Berry	Postmistress	882	Jan. 23, 1922	Jan. 19	170	Mar. 31	45	12	4·40	45·75	17·60	12·00	75·35	Third Prize, £5.
2053	Col. L. G. Gisborne, C.M.G.	Cid's Raleigh Spectre	805	Mar. 1, 1922	Apr. 28	72	—	43	8	3·95	43·50	15·80	3·20	62·50	H.C.
2071	Oscar F. Rowntree	Wotton Airelustria	854	Jan. 25, 1923	May 4	66	—	34	8	5·47	34·50	21·88	2·60	58·98	H.C.
Class 25		*Kerry*													
2108	Elmhurst Farming & Trading Co., Ltd.	Flora of Carton	952	Mar. 23, 1917	Apr. 14	86	—	45	4	3·40	45·25	13·60	4·60	63·45	Second Prize, £10 and Reserve for Champion, £5.
2110	Kerry Estates, Ltd.	Ruby of Carton	1043	May 13, 1918	Mar. 15	116	—	36	8	3·17	36·50	12·68	7·60	56·78	H.C.
2111	Kerry Estates, Ltd.	Valencia Eileen 3rd	987	Mar. 14, 1916	May 6	64	—	51	0	3·02	51·00	12·08	2·40	65·48	First Prize, £15; Champion, £10; and Challenge Cup
2112	Kerry Estates, Ltd.	Valencia Sunflower	966	Mar. 18, 1921	May 10	60	—	45	0	3·12	45·00	12·48	2·00	59·48	Third Prize, £5.
2113	Brig.-Gen. Ll. Palmer	Coquet Geranium	938	Apr. 22, 1917	Apr. 27	73	May 30	38	4	3·97	38·25	15·88	3·30	57·43	H.C.
Class 253		*Dexters.*													
2159	Trustees of Arley Estate	Fillongley Flotsam	658	May 28, 1920	May 22	48	—	32	0	4·47	32·00	17·88	0·80	50·68	Second Prize, £10.
2160	Miss Dora Box	Wightwick Gipsy	574	Dec. 10, 1921	May 18	52	—	21	4	4·00	21·25	16·00	1·20	38·45	—
2163	Mrs. F. Atherton Brown	Bourton Hill Scarlet Pimpernel	623	1920	Mar. 26	105	—	33	0	3·55	33·00	14·20	6·50	53·70	First Prize, £15.
2165	Mrs. E. Crawford	Bourton Hill Agate	658	1917	Feb. 24	135	June 10	31	8	2·62	31·50	10·48	4·00	45·98	Fat below Standard.
2167	W. Lindsay Everard, M.P.	Fillongley Forest Fawn	637	July 19, 1919	May 19	51	—	29	0	3·40	29·00	13·60	1·10	43·70	—
2168	W. Lindsay Everard, M.P.	Fillongley Forest Flower	714	Sept. 9, 1920	May 19	51	—	28	12	3·20	28·75	12·80	1·10	42·65	H.C.
2170	W. Lindsay Everard, M.P.	Pulcinella 10th	812	June 27, 1919	Apr. 19	62	—	25	0	3·72	25·00	14·88	2·20	42·08	—
2171	Col. W. O. Gibbs	Barrow Bee 6th	700	June 23, 1921	May 23	47	—	31	12	3·65	31·75	14·60	0·70	47·05	Fifth Prize, £3.
2179	Mrs. C. L. Pickard	Quernmore Princess	707	June 20, 1921	Apr. 19	81	—	30	8	3·25	30·50	13·00	4·10	47·60	Fourth Prize, £4.
2180	Rev. R. Lingard Simkin	Oakridge Emerald 3rd	658	June 4, 1914	Apr. 24	76	—	33	0	3·42	33·00	13·68	3·60	50·28	Third Prize, £5.
2183	Miss Dora Box	Wightwick Dot	399	Apr. 26, 1923	May 13	57	—	18	4	3·75	18·25	15·00	1·70	34·95	—

Agricultural Society for the Jersey Cow obtaining greatest number of points :—

F. B. Imbert-Terry, **Blue Hayes Sporran.**

The "Elmhurst" Perpetual Silver Challenge Cup, value Fifty Guineas, offered by the British Kerry Cattle Society, for the Kerry Cow obtaining the highest number of points :—

Kerry Estates Ltd., **Valencia Eileen 3rd.**

TABLE II.

No. of Cows Competing	Breed	Live Weight	Days in Milk	Milk		Fat per cent.	Points
		Lb.		Lb.	oz.		
18	Shorthorn	1414	44	55	$10\frac{4}{9}$	3·31	69·55
2	Non-Pedigree Shorthorn .	1424	23	56	6	4·11	72·81
9	Lincolnshire Red Shorthorn	1468	42	56	$13\frac{1}{3}$	3·26	70·96
2	South Devon	1701	108	42	12	4·13	61·09
10	Red Poll	1270	75	45	12	3·23	62·46
4	Blue Albion	1447	24	56	1	3·60	70·48
26	British Friesian	1469	72	67	8	2·76	79·89
5	Ayrshire	1109	43	57	$1\frac{3}{5}$	3·03	70·31
17	Guernsey	987	72	37	$11\frac{1}{2}$	4·33	57·95
14	Jersey	866	108	38	$2\frac{4}{7}$	4·60	62·90
5	Kerry	977	79	43	$3\frac{1}{5}$	3·33	60·52
11	Dexter	649	69	28	$8\frac{8}{11}$	3·64	45·19

BUTTER TESTS (CLASSES 254A & B).

Out of an entry of 105, 81 animals were present to compete for the Butter Test Prizes, and of these 37 were disqualified from receiving mention as their milk showed a butter ratio of over 30 lb., which means that it would take 3 gallons of milk in each case to make 1 lb. butter, estimating a gallon of milk to weigh 10 lb.

The cattle, both in the milking and butter test trials, were weighed at 6 p.m. on Wednesday, July 8, and in the case of the Butter Test Cattle were afterward placed in their respective classes, A and B. Those exceeding 900 lb. live weight being in A Class and those not exceeding that figure in B Class.

Full particulars of the trials are given in Table III and the average results of each breed in Table IV.

Churning commenced on Friday morning, July 10, at 9.30 a.m. and the awards were all posted up at 7 p.m.

TABLE III.—RESULTS OF BUTTER TESTS AT CHESTER, 1925.

CLASS 254A.—COWS EXCEEDING 900 LB. LIVE WEIGHT.

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last service	Milk yield in 24 hours		Butter yield		Butter ratio[1]	No. of points for butter	No. of points for period of lactation	Total No. of points	Awards
			Lb.		1925		1925	Lb.	oz.	Lb.	oz.					
		Dairy Shorthorn														
1317	Sir Wm. Hicking, Bt.	Lizzie Wild Eyes 2nd	1204	Mar. 21, 1916	May 20	50	—	53	4	1	8½	34·77	24·50	1·00	25·50	Ratio over 30
1324	Maurice & Ashton	Preshute Pandora	1687	Oct. 3, 1917	May 26	44	—	69	8	2	5¾	29·45	37·75	0·40	38·15	H.C.
1326	J. Pierpont Morgan	Hadnock Charming Lass 9th	1512	June 30, 1914	June 10	29	—	57	4	2	6	24·10	38·00	—	38·00	H.C.
1327	J. Pierpont Morgan	Kirklevington Lady 2nd	1407	Apr. 12, 1917	Apr. 30	70	—	39	0	1	5¾	28·68	21·75	3·00	24·75	—
1336	Duke of Westminster	Dinah Winn	1344	Dec. 18, 1918	June 15	24	—	56	12	2	3½	25·58	35·50	—	35·50	H.C.
1338	Capt. A. S. Wills	Thornby Foggathorpe 2nd	1442	Sept.11, 1914	June 6	33	—	64	12	2	13	23·02	45·00	—	45·00	Fourth Prize.
1339	Capt. A. S. Wills	Thornby Foggathorpe 7th	1386	June 3, 1917	June 12	27	—	63	12	1	12	36·43	28·00	—	28·00	Ratio over 30
1348	Mrs. E. M. Fitz-Hugh	Rosette Prim 4th	1575	Feb. 17, 1919	June 17	22	—	64	0	2	11½	23·53	43·50	—	43·50	H.C.
1355	J. Pierpont Morgan	Longhills Belle 2nd	1400	Jan. 13, 1920	June 1	38	—	57	12	1	9¼	36·59	25·25	—	25·25	Ratio over 30
1358	Major S. P. Yates	Rickerscote Foggathorpe	1386	Jan. 25, 1920	May 28	42	—	66	12	2	0½	32·86	32·50	0·20	32·70	Ratio over 30
1360	Major S. P. Yates	Sorbrook Foggathorpe	1505	May 15, 1920	May 28	42	—	63	0	2	11¾	23·04	43·75	0·20	43·95	H.C.
1367	R. O. Hermon	Crook Foggathorpe 2nd	1540	Jan. 26, 1921	June 3	36	—	46	0	1	6	33·45	22·00	—	22·00	Ratio over 30
1383	Capt. A. S. Wills	Thornby Foggathorpe 12th	1358	May 19, 1921	June 15	24	—	47	8	2	1¾	22·51	33·75	—	33·75	H.C.
		Lincoln Red Shorthorn														
1438	John Evens & Son	Burton Opal 2nd	1617	Mar., 1920	May 28	42	—	69	4	1	15¾	34·89	31·75	0·20	31·95	Ratio over 30
1448	John Evens & Son	Burton Cherry 4th	1435	Sept.23, 1917	June 15	24	—	61	0	2	5½	26·02	37·50	—	37·50	H.C.
1449	John Evens & Son	Burton Fillpail 6th	1638	Mar., 1918	June 18	21	—	53	4	1	11	31·55	27·00	—	27·00	Ratio over 30
1451	Lt.-Col. Sir A. G. Weigall	Foston 80	1393	Oct. 18, 1921	Apr. 15	85	—	49	4	1	11	29·18	27·00	4·50	31·50	H.C.
1452	Lt.-Col. Sir A. G. Weigall	Langford Polly 5th	1428	Sept., 1914	May 28	42	—	61	0	2	3	27·88	35·00	0·20	35·20	H.C.
		South Devon														
1503	Walter Hunt	Milkmaid 9th	1582	Sept. 2, 1916	Apr. 13	87	June 20	45	0	1	15½	22·85	31·50	4·70	36·20	H.C.
1504	Walter Hunt	Milkmaid 10th	1820	Aug. 2, 1917	Mar. 2	129	May 29	40	8	1	13	22·34	29·00	8·90	37·90	H.C.
		Red Poll														
1557	Viscount Folkestone	Longford Ruby	1309	Aug. 19, 1915	Apr. 25	75	—	44	4	1	9¾	27·49	25·75	3·50	29·25	—
1559	Mrs. R. M. Foot	White Hill Blue Belle	1288	Oct. 16, 1921	June 2	37	—	31	0	1	5	23·61	21·00	—	21·00	—
1560	Mrs. R. M. Foot	White Hill Molly	1204	Aug. 26, 1919	Mar. 28	103	—	42	4	1	5½	31·44	21·50	6·30	27·80	Ratio over 30
1567	Major J. A. Morrison	Sudbourne Comfit	1351	Aug. 10, 1916	Mar. 27	104	June 25	59	4	2	1¼	28·51	33·25	6·40	39·65	H.C.
1568	Walter Scrimgeour	Tendring Floss 29th	1421	Oct. 1, 1916	May 1	69	June 30	55	0	1	15½	27·90	31·50	2·90	34·40	H.C.
		Blue Albion														
1636	Arnold Gillett	Bradbourne Hiawatha	1295	1921	June 19	20	—	44	8	1	12½	24·84	28·50	—	28·50	H.C.
1645	J. D. Seals	Pike Kate	1393	—	June 20	19	—	48	4	1	13¾	25·94	29·75	—	29·75	—

1646	T. H. Swire & Sons	Mount Kitty	1491	1918	June 5	34	—	64	12	2	12¾	23·15	44·75	—	44·75	Fifth Prize.
1647	T. H. Swire & Sons	Mount Sweetheart . . .	1582	1918	June 10	29	—	65	12	2	1	34·87	33·00	—	33 00	Ratio over 30
		British Friesian														
1728	Lord Barnby . .	Beccles Queen Anne . .	1631	Sept.14, 1916	Apr. 15	85	—	60	0	1	8¼	39·58	24·25	4·50	28·75	Ratio over 30
1729	Lord Barnby . .	Crawley Topthorne 2nd .	1400	July 28, 1919	May 30	39	—	69	4	1	15¼	35·45	31·25	—	31·25	Ratio over 30
1731	Lt.-Col. C. W. Birkin	Lamcote Maryanah . .	1414	Apr. 17, 1920	May 25	45	—	59	0	1	9¼	37·38	25·25	0·50	25·75	Ratio over 30
1733	A. & J. Brown . .	Hedges Bles Julian . .	1372	Dec. 10, 1919	May 24	46	—	90	4	1	11¼	52·99	27·25	0·60	27·85	Ratio over 30
1735	A. & J. Brown . .	Hedges Gemke Brand . .	1330	Oct. 14, 1916	Feb. 24	135	June 19	73	8	1	15¼	37·63	31·25	4·00	35·25	Ratio over 30
1738	Capt. J. Christie, M.C.	Terling Breeze 8th . . .	1498	Aug. 11, 1918	May 25	45	—	75	0	1	7	52·17	23·00	0·50	23·50	Ratio over 30
1742	J. P. Fletcher . .	Osmaston Jenny . . .	1463	Feb. 19, 1916	May 29	41	—	97	0	2	6½	40·31	38·50	0·10	38·60	Ratio over 30
1750	Ernest B. Hall . .	Hales (imp. 1922) Rika .	1407	Mar. 29, 1921	Feb. 28	131	—	53	12	1	13	29·65	29·00	5·00	34·00	H C.
1751	Stuart Heaton . .	Sudbourne Dairymaid .	1715	Jan. 12, 1919	Apr. 9	91	—	60	8	1	6¾	42·54	22·75	5·10	27·85	Ratio over 30
1753	G. Holt Thomas .	Colton Sunray	1519	Oct. 31, 1918	Mar. 19	112	—	63	12	2	1½	30·44	33·50	7·20	40·70	Ratio over 30
1760	Mrs. S. Johnson. .	Caplow Doris	1239	Dec. 12, 1916	Mar. 31	100	June 16	58	0	1	8	38·66	24·00	6·00	30·00	Ratio over 30
1762	Trustees of David Moseley	Thurston Ellen	1498	Apr. 26, 1920	June 14	25	—	59	4	1	13¾	31·86	29·75	—	29·75	Ratio over 30
1763	F. & T. Neame . .	Macknade Elicit . . .	1512	July 20, 1919	May 29	41	—	81	12	1	6½	58·13	22·50	0·10	22·60	Ratio over 30
1764	F. & T. Neame . .	Macknade Esther . . .	1379	May 3, 1918	June 7	32	—	64	0	1	6½	45·51	22·50	—	22·50	Ratio over 30
1765	F. & T. Neame . .	Macknade Event . . .	1295	May 29, 1918	Apr. 26	74	—	82	4	1	1½	75·20	17·50	3·40	20·90	Ratio over 30
1768	G. B. Radcliffe .	Tarvin Garland . . .	1470	Mar. 6, 1917	June 5	34	—	72	0	2	1¾	34·13	33·75	—	33·75	Ratio over 30
1770	Lord Rayleigh . .	Terling Trix 4th . . .	1323	Nov. 22, 1917	Feb. 14	145	May 9	57	0	1	3¾	46·17	19·75	10·50	30·25	Ratio over 30
1771	Walter B. Robinson	Felhampton Ariadne . .	1596	Nov. 20, 1918	May 14	56	—	86	0	1	3½	70·56	19·50	1·60	21·10	Ratio over 30
1772	Friend Sykes . .	Kingswood Ceres Daisy .	1400	Nov. 21, 1919	Feb. 5	154	Apr. 26	61	8	2	2¼	28·72	34·25	11·40	45·65	Third Prize
1774	W. & R. Wallace .	Bladen Katy Did . . .	1337	Feb. 19, 1919	June 22	17	—	66	4	2	2¼	30·94	34·25	—	34·25	Ratio over 30
1775	W. & R. Wallace .	Winnings Aeum. . . .	1407	Apr. 11, 1917	April 1	99	June 18	57	12	1	11¾	33·29	27·75	5·90	33·65	Ratio over 30
		Ayrshire														
1881	James Howie . .	Friendlesshead Blossom 4th	1225	Apr., 1913	June 12	27	—	58	12	1	13½	32·63	29·50	—	29·50	Ratio over 30
1885	A. W. Montgomerie	Beuchan Rosie 5th . . .	1078	Oct. 24, 1917	June 16	23	—	63	12	1	15½	32·38	31·50	—	31·50	Ratio over 30
1887	Jacob S. Murray .	Dolgig Keepsake . . .	1260	Mar., 1920	May 31	39	—	63	0	1	9	40·32	25·00	—	25·00	Ratio over 30
		Guernsey														
1928	W. A. Argent . .	Flora's Buttercup of the Fountain	1057	Dec. 16, 1918	May 22	48	—	36	4	1	7½	24·68	23·50	0·80	24·30	—
1930	A. Chester Beatty .	Golden Queen of Goodnestone	1190	Aug. 31, 1916	Apr. 10	90	June 19	40	8	1	12¾	22·53	28·75	5·00	33·75	H.C.
1944	Sir James Remnant, Bart., M.P.	Dene Lady Hester . . .	945	May 24, 1920	Mar. 27	104	—	50	8	1	0¾	31·37	25·75	6·40	32·15	Ratio over 30
1959	Mrs. F. H. T. Jervoise	Herriard Dora 3rd . . .	931	Mar. 23, 1921	May 18	52	June 28	32	0	1	8½	20·89	24·50	1·20	25·70	—
1965	Mrs. F. Sainsbury .	Downe Pearl 3rd . . .	1099	Nov. 12, 1921	June 10	29	—	23	4	1	13¼	12·50	29·75	—	29·75	H.C.
		Jersey.														
2031	Mrs. Evelyn . .	Fairlawne Hussy . . .	1099	Aug. 8, 1916	Feb. 4	155	May 28	49	0	2	11	18·23	43·00	8·00	51·00	Second Prize and Silver Medal.
2037	F. B. Imbert-Terry	Blue Hayes Sporran . .	931	Dec. 16, 1917	Feb. 13	148	May 20	52	8	2	13	18·75	45·00	8·00	53·00	First Prize and Gold Medal.
2046	R. Bruce Ward . .	Pirouette	938	Apr. 3, 1920	May 19	51	—	51	12	2	5½	22·22	37·25	1·10	38·35	Cert. of Merit.

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[1] The "Butter ratio" represents the number of lb. of milk required to make 1 lb. of butter. Ten lb. of milk are reckoned as equal to an imperial gallon.

TABLE III.—RESULTS OF BUTTER TESTS AT CHESTER, 1925—*continued.*

CLASS 254A.—COWS NOT EXCEEDING 900 LB. LIVE WEIGHT.

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last service	Milk yield in 24 hours		Butter yield		Butter ratio[1]	No. of points for butter	No. of points for period of lactation	Total No. of points	Awards
			Lb.		1925		1925	Lb.	oz.	Lb.	oz.					
2054	C. J. Phillips . .	Fly's Sweetheart	966	Jan. 25, 1922	May 28	42	—	44	12	1	14	23·86	30·00	0·20	30·20	Cert. of Merit.
		Kerry														
2108	Elmhurst Farming & Trading Co., Ltd.	Flora of Carton	952	Mar. 23, 1917	Apr. 14	86	—	45	4	1	6¾	31·82	22·75	4·00	27·35	Ratio over 30
2110	Kerry Estates, Ltd.	Ruby of Carton . . .	1043	May 13, 1918	Mar. 15	116	—	36	8	1	3	30·73	19·00	7·00	26·60	Ratio over 30
2111	Kerry Estates, Ltd.	Valencia Eileen 3rd . .	987	Mar. 14, 1916	May 6	64	—	51	0	1	9¾	31·69	25·75	2·40	28·15	Ratio over 30
2112	Kerry Estates, Ltd.	Valencia Sunflower . .	966	Mar. 18, 1921	May 10	60	—	45	0	1	7	31·30	23·00	2·00	25·00	Ratio over 30

CLASS 254B.—COWS NOT EXCEEDING 900 LB. LIVE WEIGHT.

No. in Catalogue	Exhibitor	Name of cow	Live weight	Date of birth	Date of last calf	No. of days in milk	Date of last service	Milk yield in 24 hours		Butter yield		Butter ratio[1]	No. of points for butter	No. of points for period of lactation	Total No. of points	Awards
		Guernsey														
1929	A. Chester Beatty .	Calehill Golden Lady . .	896	July 27, 1920	Mar. 7	124	—	26	12	1	5¾	19·67	21·75	5·00	26·75	—
1939	Mrs. J. E. Kirby .	Dawn of Meadow View . .	896	Nov. 28, 1920	June 10	29	—	51	12	2	9	20·19	41·00	—	41·00	Second Prize.
1948	Miss E. M. Attlee .	Grasmere Bluebell 2nd .	763	Aug. 19, 1922	May 24	46	—	24	0	1	0	24·00	16·00	0·60	16·60	—
1950	A. Chester Beatty .	Calehill Princess 2nd . .	833	Oct. 11, 1922	Feb. 12	147	May 27	25	0	1	5¼	18·82	21·25	8·00	29·25	—
1966	A. Chester Beatty .	Calehill Lizzie	742	Apr. 11, 1923	May 2	68	—	26	4	1	2	23·33	18·00	2·80	20·80	—
		Jersey														
2024	Mrs. Harry Briggs .	Petune's Victory . . .	819	Aug. 26, 1918	May 11	59	—	39	8	1	5¾	29·05	21·75	1·90	23·65	—
2030	George Cross . .	Roberta Star 2nd . . .	840	Oct. 15, 1920	Apr. 10	90	—	35	4	1	5¼	26·54	21·25	5·00	26·25	—
2034	Col. L. G. Gisborne, C.M.G.	Belle Farineuse . . .	826	Mar. 30, 1920	Feb. 2	157	Apr. 12	22	4	1	3	18·73	19·00	11·70	30·70	—
2035	Col. L. G. Gisborne, C.M.G.	Sweetbread 50th . . .	819	Aug. 5, 1919	Jan. 22	168	Apr. 14	29	8	1	4½	23·02	20·25	12·00	32·50	—
2042	L. E. Tubbs . .	Glenny	791	June 26, 1918	June 9	30	—	31	4	0	15½	32·25	15·50	—	15·50	Ratio over 30.
2044	L. E. Tubbs . .	Queen Elizabeth . . .	896	Jan. 12, 1916	Mar. 15	116	June 15	23	0	1	11¾	13·26	27·75	7·60	35·35	Fourth Prize.
2045	R. Bruce Ward . .	Miranda's Lass	819	Nov. 5, 1919	Mar. 10	121	June 21	39	0	1	11¼	22·89	27·25	8·00	35·25	Fifth Prize.
2047	R. Bruce Ward . .	Privet	812	May 3, 1920	Mar. 17	114	—	37	8	2	0¼	18·60	32·25	7·40	39·65	Third Prize.
2050	Grosvenor Berry .	Postmistress	882	Jan. 23, 1922	Jan. 19	170	Mar. 31	45	12	2	4¼	20·19	36·25	12·00	48·25	First Prize and Bronze Medal.
2053	Col. L. G. Gisborne, C.M.G.	Cid's Raleigh Spectre . .	805	Mar. 1, 1922	Apr. 28	72	—	43	8	1	15	22·45	31·00	3·20	34·20	Cert. of Merit.

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[1] The "Butter ratio" represents the number of lb. of milk required to make 1 lb. of butter. Ten lb. of milk are reckoned as equal to an imperial gallon.

TABLE IV.—*Average Results obtained from the Cows in the Butter Test Classes.*

CLASS 254A.—EXCEEDING 900 lb. LIVE WEIGHT.

No. of Cows Competing.	Breed	Live weight	Days in milk	Milk		Butter yield		Ratio	Total Points
		Lb.		Lb.	oz.	Lb.	oz.	Lb.	
13	Shorthorn . . .	1442	37	57	10¼	2	1¼	27·73	33·25
5	Lincolnshire Red Shorthorn . . .	1502	42	58	12	1	15½	29·89	31·70
2	South Devon . .	1701	108	42	12	1	14¼	22·61	37·05
5	Red Poll	1314	77	46	5½	1	10½	27·98	30·20
4	Blue Albion . . .	1440	25	55	13	2	2	26·19	34·00
21	British Friesian . .	1438	73	68	15	1	11½	40·11	31·10
3	Ayrshire. . . .	1187	29	61	13⅓	1	12⅔	34·46	28·66
5	Guernsey . . .	1044	64	36	8	1	10½	22·03	28·90
4	Jersey	983	99	49	8	2	6¾	20·43	44·65
4	Kerry	987	81	44	7	1	6½	31·60	26·60

CLASS 254B.—COWS NOT EXCEEDING 900 lb. LIVE WEIGHT.

No. of Cows Competing.	Breed	Live weight	Days in milk	Milk		Butter yield		Ratio	Total Points
5	Guernsey . . .	826	82	30	12	1	7¾	20·71	27·95
10	Jersey	830	109	34	10½	1	9¼	21·96	32·15

MILK YIELD TRIALS

(GOATS, CLASSES 264 AND 265).

The number of goats competing in these Trials was 26 out of an original entry of 38. These were milked out on Tuesday, July 7, at 7 p.m., the milk for the next 24 hours being taken for the Quality Trials with an extra milking 12 hours for the quantity trials. Mr. Thomas W. Palmer, the Hon. Secretary of the British Goat Society, was present and kindly superintended the whole of the work. Full particulars of the Trials are given in Table on page 190.

EXPERIMENTS IN THE DAIRY.

CHESHIRE CHEESE.

Chester being a centre of the Cheshire Cheese industry, it was decided to carry out experiments to show that the quality, and perhaps the quantity, of the cheese might be improved if milk with a somewhat higher percentage of fat than 3 per cent. were used.

With a view to obtain this it was proposed to use Channel Island milks in the proportion of 25 per cent., the remaining 75 per cent. being milk from the Dairy Shorthorn and British

TABLE V.—MILK-YIELD CLASSES FOR GOATS AT CHESTER, 1925

No. in Catalogue	Exhibitor	Name of goat	Breed	Date of birth	Date of last kid	No. of days in milk	Total Milk Yield	Percentage of Fat		Percentage of Solids not Fat		Points						Awards and Remarks
							Lb. oz.	Morn.	Even.	Morn.	Even.	Milk.	Fat. lb.	Solids not Fat	Lactation	Deduction	Total.	
	CLASS 264 (Quality).																	
2225	Miss M. Henderson	Sandhill Gassy	Toggenburg	April 8, 1920	1925 May 6	62	8 9	2·58	3·52	8·32	8 62	8·56	5·22	2·90	0·30	—	15·98	—
2226	Mrs. J. C. Straker	Leazes Hackee	Toggenburg	Feb. 15, 1920	Jan. 6	182	10 0	3·10	2·74	7·88	8·04	10·00	5·84	3·18	2·30	—	20 32	—
2229	Mrs. A. Abbey	Didgemere Deutchia.	British Saanen	Mar. 31, 1923	April 27	71	12 8	4·20	4·27	8·48	8·77	12·50	10·58	4·31	0·50	—	27·89	Fourth.
2235	Mrs. J. C. Straker	Leazes Fibarena	British Saanen	May 1, 1923	1924 Sept. 4	306	8 13	3·85	3 59	8·83	8·87	8·81	6·56	3·11	4·40	—	22·88	Reserve.
2237	Miss K. Pelly	Nash Bellona	Anglo-Nubian	Mar. 25, 1920	1925 Mar. 24	105	8 4	5·03	5·95	8·97	9·37	8·25	9·04	3·02	1·00	—	21·31	H.C. Reserve for Pomeroy Cup.
2238	Miss K. Pelly	Theydon Belladonna.	Anglo-Nubian	Sept. 13, 1922	May 14	54	8 5	6·90	5·88	9·14	9·38	8·31	10·60	3·07	0·20	—	22·18	H.C. Pomeroy Cup.
2239	Miss K. Pelly	Theydon Almond	Anglo-Nubian	Feb 26, 1922	Feb. 18	139	6 5	6·12	5·88	9·56	9·66	6·31	7·56	2·43	1·60	—	17·90	—
2241	Mrs. C. L. Pickard	Edenbreck Thorn	Anglo-Nubian	April 17, 1923	May 14	54	3 15	6·38	6·15	8·68	8·75	3·93	4·92	1·37	0·20	—	10·42	—
2242	Mrs. C. L. Pickard	Towcester Peaches	Anglo-Nubian	Aug. 5, 1918	Feb. 8	149	2 8	5·16	5·62	10·14	10 02	2·50	2·57	1·01	1·80	—	7·88	—
2243	Mrs. A. Abbey	Didgemere Dawdler	British Alpine	June 1, 1921	Jan. 23	165	10 5	5·32	3·29	8·72	8·45	10·31	9 01	3·55	2·00	—	24 87	Fifth.
2244	Mrs. A. Abbey	Didgemere Delilah	British Alpine	May 19, 1922	Feb. 24	133	13 3	4·27	3·52	8·47	8·86	13·18	10 41	4·55	1·50	—	29 64	Third
2245	Mrs. A. Abbey	Didgemere Dream	British Alpine	Feb. 17, 1923	May 19	49	17 8	3·91	4·00	8·53	8·54	17·50	13·83	5·98	0·10	—	37·41	First. DewarTrophy and Dual Purpose Challenge Certificate.
2246	Mrs. A. Abbey	Didgemere Dusky	British Alpine	May 6, 1921	Mar. 14	115	14 7	4·28	3·93	8·52	8 45	14·43	11·88	4·90	1·20	—	32 41	Second. Reserve for Dewar Trophy.
2248	Mrs. J. C. Straker	Leazes Kirtle	British Alpine	Mar. 24, 1922	May 7	122	9 4	4·14	3·31	8·48	8·63	9·25	6 91	3·16	1·30	—	20 62	H.C.
2250	Miss M. Henderson	Riding Topaz	Anglo-Nubian Swiss	Feb. 18, 1923	April 12	86	6 6	4·11	4 10	8·49	8 80	6 37	6·91	3·16	0·70	—	17·14	—
2252	Mrs. R. E. Wroughton	South Petherton Friesian	Anglo-Nubian Swiss	Jan. 29, 1923	May 14	54	5 0	4·13	3·47	9·43	9 23	5 00	5 23	2·20	0·20	—	12 63	—
	CLASS 265 (Quantity).																	
2225	Miss M. Henderson	Sandhill Gassy	Toggenburg	April 8, 1920	May 4	62	12 10	—	—	—	—	12·62	—	—	0 30	—	12 92	—
2226	Mrs. J. C. Straker	Leazes Hackee	Toggenburg	Feb. 5, 1920	Jan. 6	182	14 15	—	—	—	—	14 93	—	—	2 30	—	17 23	Reserve.
2235	Mrs. J. C. Straker	Leazes Fibarena	British Saanen	May 1, 1923	1924 Sept. 4	306	12 14	—	—	—	—	12 87	—	—	4 40	—	17·27	Fifth.
2244	Mrs. A. Abbey	Didgemere Delilah	British Alpine	Mar. 19, 1922	1925 Feb. 24	133	19 2	—	—	—	—	19·12	—	—	1 50	—	20·62	Third.
2245	Mrs. A. Abbey	Didgemere Dream	British Alpine	Feb. 17, 1923	May 19	49	25 14	—	—	—	—	25·87	—	—	0 10	—	25 97	First.
2246	Mrs. A. Abbey	Didgemere Dusky	British Alpine	May 6, 1921	Mar. 14	115	21 7	—	—	—	—	21·43	—	—	1 20	—	22·63	Second.
2248	Mrs. J. C. Straker	Leazes Kirtle	British Alpine	Mar. 24, 1922	Mar. 7	122	13 12	—	—	—	—	13·75	—	—	1·30	—	15 05	H C.
2250	Miss M. Henderson	Riding Topaz	Anglo-Nubian Swiss	Feb. 18, 1923	April 12	86	9 12	—	—	—	—	9·75	—	—	0·70	—	10·45	—
2251	Mrs. Morcom	Leazes Fortitude	Anglo-Nubian Swiss	Mar. 4, 1919	Mar. 12	117	19 2	—	—	—	—	19·12	—	—	1 20	—	20·32	Fourth.
2252	Mrs. R. E. Wroughton	South Petherton Friesian	Anglo-Nubian Swiss	Jan. 29, 1923	Mar. 14	54	7 9	—	—	—	—	7·56	—	—	0·20	—	7·76	—

Friesian breeds. These milks were all obtained from the cows on the Showground, the following milks being used :—

1.—Shorthorn, from morning's milk.
2.—British Friesian, from morning's milk.
3.—Shorthorn, from evening milk.
4.—British Friesian, from evening milk.
5.—Shorthorn and Jersey.
6.—Shorthorn and Guernsey.
7.—British Friesian and Jersey.
8.—British Friesian and Guernsey.

The Table on page 192 gives full details of the trial, the cheeses being placed in their order of milk.

The sulphuric acid supplied for the Gerber Tester was found on Monday morning to be unsuitable and a fresh supply could not be obtained until Wednesday. It was therefore impossible to ascertain the percentage of fat in each lot of milk throughout the week. The average fat percentages in the milk of the cattle entered for the milking trials (from which milks the cheeses had been made) give a fairly approximate idea of the quality of the milks used in this experiment. These fat percentages were as follows :—Shorthorn, 3·31 fat; British Friesian, 2·76 fat; Guernsey, 4·33 fat; Jersey, 4·60 fat.

A glance at the figures will show that it was difficult to obtain sufficient milk in the afternoon, so cheeses from the Shorthorn and Friesian milks were made twice, one lot of 40 gallons being used in each case from morning's milk and a second cheese being made from 30 gallons of evening milk.

The cheeses were taken from the Show to the Farm Institute at Penkridge, Stafford, where they were looked after by Miss E. Noble, the Dairy Instructress to the Staffordshire County Council. They were subsequently judged by Mr. J. C. Ruston, the Principal of the Institute, who has on previous occasions undertaken this work for the Society, for which I ask him again to accept their sincere thanks.

Looking at the result of the experiment it would appear that the addition of Channel Island milk to the Dairy Shorthorn and British Friesian milks has resulted in an improved cheese in every respect.

The bitter flavour noted against the Friesian cheese is probably due to the food the cows were having.

WENSLEYDALE CHEESE.

As Wensleydale is a comparatively easy cheese to make and one which is increasing in popularity, 3 cheeses from the milks of the Ayrshire and Channel Island breeds were made during the week of the Show. Table VII gives full particulars connected with the making of the cheeses.

TABLE VI.

Date	Breed	Milk in Gallons	Time of Milking	Quality of Curd	Weight in lb.				Remarks	Order of Merit
					Curd	Cheese from Press	Ripe Cheese	Loss in Weight		
1925 July 8	Shorthorn Guernsey	30 } 40 10	a.m. p.m.	Good	57½	46½	42¾	3¾	Quality very good. Colour very good. Flavour good. Fine silky open texture	First
July 7	Shorthorn Jersey	30 } 40 10	p.m. p.m.	Good	51	45	42¼	3¾	Quality very good. Colour very good. Flavour very good. Fine silky texture, rather close	Second
July 7	British Friesian Jersey	30 } 40 10	p.m. p.m.	Good	50	44¾	39¼	5½	Quality good. Colour fair. Flavour bitter. Fine open texture	Third
July 8	British Friesian Guernsey	30 } 40 10	a.m. p.m.	Good	50	44	39	5	Quality good. Colour fair. Flavour bitter. Good open texture	Fourth
July 10	Shorthorn	30 30	p.m.	Good	37	32¾	30¼	2½	Quality very good. Colour good. Flavour good. Texture rather close	Fifth
July 6	Shorthorn	40 40	a.m.	Good	46	39½	36½	3	Quality very good. Colour good. Flavour good. Texture close	Sixth
July 6	British Friesian	40 40	a.m.	Medium	47½	42¼	36¼	6	Quality good. Colour fair. Flavour fair, slightly bitter. Texture close	Seventh
July 9	British Friesian	30 30	p.m.	Good	32	29½	27	2½	Quality good. Colour dull. Flavour good. Texture good, open	Eighth

TABLE VII.

WENSLEYDALE CHEESE EXPERIMENT.

Date	Breed	Milk in Gallons	Quantity Curd in lb.	Quality of Curd	Weight					Remarks
					Cheese from press		Cheese when ripe	Loss in weight		
					lb.	oz.	lb.	lb.	oz.	
July 6	Jersey . .	12	18	Rather firm	15	0	13	2	0	Quality and flavour fair. Texture soft.
July 7	Ayrshire . .	12	17	Very good	13	3	10	3	3	Quality very good. Flavour good. Texture good. Blue veined.
July 8	Guernsey. .	12	20	Very good	16	8	12	4	8	Quality very good. Flavour good. Texture rather close. Blue veined.

As all the milk from the cattle in the Showground has to be brought to the Dairy during the time cattle are in the yard, the Dairy Staff, when not engaged with the Milk Yield and Butter Test trials, were employed in the making of cream and other soft cheeses, and the manufacture of scalded cream from the various milks, showing how to get the best results therefrom, by securing correct temperatures, noting times for setting, etc., etc., and other details, all of which can be obtained at the dairy—and in the making of cheese mixtures, an economical way of using up cheese which has gone dry—to which must be added the sampling of milk and the use of the Gerber Tester.

The work in the Dairy is hard and continuous, and to the Stewards, the dairymaids and all the workers in and about the Dairy, particularly to Mr. Hasted, whose assistance to me is invaluable, I am again privileged to return my most sincere thanks.

ERNEST MATHEWS.

Elmodesham House,
Amersham.

AGRICULTURAL EDUCATION EXHIBIT, CHESTER, 1925.

THE dissemination of the results of research and other agricultural investigations and experiments is by no means the least function in the scheme of agricultural education. To fulfil this purpose effectively the practical results of research work must reach the farmers for whose benefit it is intended. These results can only become available if, and when, they are published. In certain fields of research such publications would not be readily understood by the majority of farmers, and it is important that the circulation and acquisition of knowledge should not be prejudiced by the use of highly technical language. While courses of training at University centres, agricultural colleges, and farm institutes serve as a means of instilling these results into some of the future generation of farmers, the present body of farmers, their sons and daughters, who are not in a position to receive an institutional training, require different methods of information. The functions in this respect are therefore delegated to County Organisers and Advisory Officers who, by maintaining personal contact with the farming community, act as the links in the chain of transmission of new knowledge, methods and practice. By means of lectures, of discussion societies, of correspondence, and so forth, effective distribution of research is accomplished, and the system affords the means of relaying criticisms of the value of results back to the research workers.

The agricultural, daily, and weekly press, the Government departments, and various agricultural societies also take a hand in imparting this knowledge in simple ways to the farming community through their papers and publications. Latterly the introduction of wireless has increased the scope of distributing research results and made it possible for their transmission direct to the farmer.

The exhibits which are shown every year at the Society's annual show make a valuable contribution to the diffusion of agricultural knowledge and are by no means the least valuable in this direction. Inasmuch as representatives of the various stations are in attendance to explain and amplify the information set forth, exhibits of this description serve a dual purpose. The personal contact thus created ensures that the inquirer is given the salient facts, with such qualifications as are important, while at the same time the research worker is given an opportunity of becoming conversant with the practical opinions on and criticisms of his line of research. In addition they serve to create in the mind of the research worker a feeling of responsibility as to the immediate and ultimate utilitarian value of the work he presents.

The Exhibition at Chester this year, which was again under the charge of Mr. Wilfred H. Parker, attracted a large number of agricultural and other visitors.

The number of stations represented was well up to average, and the inclusion of an exhibit from the recently established Agricultural Engineering Institute at Oxford added a new feature to the educational display at the Show.

Writers of this report in the past have continually drawn attention to defects in the presentation of the material exhibited, and it becomes rather monotonous to have to repeat this criticism year after year without any evident improvement being effected in this respect. This year's exhibit was no exception in this sense. Inadequate labelling of exhibits and, in some cases, overcrowding were noticeable defects. On the other hand one station represented had so much space at its disposal that it was able to display a photograph of the staff and a syllabus of the curriculum. There also appeared to be a tendency on the part of Colleges to illustrate the educational facilities provided by them rather than the results achieved by their investigations, which conceivably is the principal object of these exhibits.

The presence of overcrowded exhibits and under-filled spaces appears to indicate that the cubicle type of stall is not altogether the most desirable. In a straight run it would be possible for one department, which might find itself overcrowded, to utilise the space not required by other departments. Overcrowding is to some extent due to a natural desire to include as many illustrations as possible without due regard being paid to their educational value. On the ground that an exhibit should have a definite educational value, it may be possible to secure a better selection of material and so help to obviate defects of this nature. The exhibit of the Cheshire School of Agriculture was a marked contrast to the exhibits of the other Research Stations. This exhibit was placed in a large tent by itself and adequate space was available for all the material. Definite breaks were made between each subject, each subject was adequately labelled, and there was plenty of room to walk around freely It is useful to give local institutions a premier place in an exhibit of this kind, as farmers from other parts of the country are keen to ascertain the prominent features of local agriculture, but other exhibitors suffered in comparison and much of their display was made ineffective from the showman's point of view. Surely the expense which is incurred in placing the exhibits of these more remote stations is alone a cogent argument that no trouble should be spared in making them serve effectively the purpose for which they are exhibited.

Lawes Agricultural Trust, Rothamsted.—The Rothamsted Station had a very comprehensive exhibit and perhaps the most interesting and practical part was that relating to the influence of manures on the yield and quality of barley. On soils which are at all suitable it is the ideal of every farmer who grows barley to obtain a malting sample. In order to be successful in this respect farmers in general have followed established practices in regard to manuring. The scheme of manuring was mainly phosphatic. Nitrogen; if used at all, was only given when barley was taken after another corn crop. In this respect practice and current teaching were largely in agreement, for it was considered that the use of nitrogen, besides leading to an excess of straw and consequent lodging at harvest time, had an adverse effect on the malting qualities of the grain. Since 1922 Sir John Russell and his colleagues have been investigating the truth or otherwise of these practices in relation to one variety of Barley, viz., Plumage Archer. A distinguishing feature is that all the experimental barleys are examined by expert maltsters and afterwards separately malted and the malt analysed. As a result they have shown that the use of nitrogen, even after roots folded, has not adversely affected the valuation of the barley or the value of the resulting malt. The use of 1 cwt. Sulphate of Ammonia had actually increased the valuation of the barley at 5 out of 7 stations, one showed the same valuation, while the remaining one gave a small decrease in the valuation as compared with land not so treated. Not only so but the mean increase in yield of barley from the use of this fertiliser was 5·4 bushels per acre. When it is remembered that statistical evidence over a long period of years shows very little increase in the yield of barley, the results achieved in these experiments are of great agricultural importance.

An interesting chart was that showing the distribution of green manuring experiments. This series of experiments is being carried out by the aid of grants from the Society. The value and importance of mustard as a green manuring crop is well known to farmers, but the growing of winter catch crops to be turned in before root crops is probably of greater agricultural significance. The retarding factors at the moment are climate and rainfall, as it appears to be established that winter catch crops for green manuring can only be successfully grown in regions with an average winter temperature of 40° F, and an annual rainfall of 30 to 40″. Investigations are therefore proceeding to discover crops which will withstand the colder and drier climates of the North and East.

Other exhibits from this Station illustrated the results of manurial experiments on the permanent barley fields at Rothamsted, the effect of manures on starch production, the possibilities of inoculation on the growth of lucerne, and the distribution of centres where artificial farm-yard manure is being produced. It is noteworthy, in connection with the latter, that in 1924 some 3,000 tons of straw were converted in Britain alone, while the spread of this method of treatment has extended to many other countries of the world, actually much larger quantities of straw being treated abroad than in this country.

Altogether this exhibit was very useful. Sir John Russell, however, appears to justify the economic practicability of his results by the *extent* of the gains he obtains, and it would have completed the picture, if in some cases the cash *value*, which is a convincing argument to the farmer, had also been demontrated.

University College of North Wales, Bangor.—This department had a wealth of material on view, but the space available was much too small, and consequently it was exceptionally difficult to sort out the various exhibits.

One of the most virulent diseases known to the flockmaster is Liver Rot, and owing to the severity of this disease last winter, sheep farmers would be specially interested in the investigations undertaken to affect a cure of this disease by the use of extract of Male Fern, B.P. Mr. Montgomery gave results of tests last winter on 90 flocks, representing an aggregate of 7,376 sheep, and the conclusion to which he comes is that Male Fern extract may, with reasonable care, be successfully employed in the treatment of the disease.

The distribution of rookeries in North Wales was the subject of another chart exhibited. The balances of gains and losses due to the presence of rooks is a matter of speculation among inquirers on the subject. One rarely finds, however, that farmers have a good word to say for them and the damage done at seed time and harvest is undoubtedly great. Similar surveys to that which Dr. Walton has conducted in North Wales would be easy to accomplish, and would provide very valuable data on which to base conclusions on the depredations of the rook.

Whey Research Factory, Haslington, Crewe.—Cheese-making is not now so largely a matter of production on a small scale on the farm, and the presence of numerous large scale cheese factories is an ordinary feature throughout the country. This evolution has rendered the disposal of whey a matter of great difficulty and to provide means for its efficient utilisation has been the subject of investigation for some years.

Whey contains very valuable food materials, but their economic extraction has been hampered by the fact that whey contains 93½ per cent. water, and therefore storage, transportation, and evaporation are expensive. The Whey Research Factory was erected to investigate the possibilities of economic condensation of whey at cheese factories and the extraction of the food material from it. Condensation of the whey to $\frac{1}{10}$ of its bulk has actually been accomplished by a vacuum evaporation process, and three classes of products, viz., lactose, lact albumen, and animal foods, are turned out. The products were on view. Two animal foods—dry whey food and whey paste—both rich in albuminoids—were shown. A statement of the cost of feeding them to pigs showed that the results were as good as those obtained by the usual method of feeding with meals alone. These foods are to be had from the factory at £12 a ton f.o.r. Whether the process of condensation is economical or whether the foods can be produced at the sale price was not disclosed, and the financial results of the methods will be awaited with keen interest by those in the dairy-farming business generally.

National Institute of Agricultural Botany, Cambridge.—A series of maps illustrating the Institute's systems of field trials was worthy of notice, for although its educational value was perhaps not very great, it demonstrated to visitors the care taken to eliminate all possible sources of error in agricultural experiments now being conducted at Research Stations.

Other exhibits included a full working plant for the testing of seeds for purity and germination.

Undoubtedly the most attractive exhibit was that of *The Cheshire School of Agriculture.* Outside the main tent were plots illustrating the many activities of this school. All the plots were well labelled, and it was therefore possible to appreciate the aims of the various experiments, one of the most useful of which is an attempt to improve the pastures on the millstone grit formation in a smoke area in N.E. Cheshire. A whole farm is being used to test various methods of improvement, and a part of the scheme, which may be said to be novel in trials of this kind, is an endeavour to keep the experiment within the means of the farmer and at the same time to keep a careful note of the finance of the whole investigation.

Another useful demonstration was a pen of pullets from sex-linked crosses, with records of the egg production, in order to show the utility of these crosses.

To deal adequately with the many subjects displayed in the internal part of the exhibit would unduly prolong this report. However, one or two matters deserve special attention. The chart, of which a copy is attached, was of value to farmers and others interested in the economics of arable dairy farming :—

COMPARATIVE RESULTS ON GRASS AND ARABLE FARMS IN SOUTH CHESHIRE, 1922–3, PER 100 ACRES.

	Grass Farm.	Arable Farm.
No. of Cows	44	62
Total milk, gallons	22,000	36,800
Income from milk	£1,077	£2,277
Labour	£400	£1,100
Manures and seeds	£35	£250
Net output	£625	£675
Net output per man	£193	£77

These figures are based on a wholly grass cheese-making farm of 187 acres and a milk-selling farm of 35 acres, twenty-five of which are arable. The figures serve to illustrate the strength and weakness of both types of holdings.

Two charts which also attracted considerable attention gave the financial results of two dairy farms, one representing the year 1822–3 and the other 1922–3. The figures are given on page 200.

The figures demonstrate in a remarkable manner the commercialisation of farming which has taken place in the 100 years interval, due to the growth of population which has made it necessary to intensify the farming business. A hundred years ago the landlord's bill was the main concern of the farmer, farming was a more self-contained business with no purchases of stock and very little of feeding-stuffs bought. To-day, the expenditure, allowing for difference in size, is over 4 times that of the earlier date, the landlord's rent has sunk to fifth place in

CHESHIRE SCHOOL OF AGRICULTURE.

FINANCE OF DAIRY FARMING. PAST AND PRESENT.

CASH EXPENDITURE AND RECEIPTS ON A FARM OF ABOUT 150 ACRES.

Lady Day, 1822–Lady Day, 1823.

Expenditure.	£	s.	d.	*Receipts.*	£	s.	d.
Cattle . . .		—		Cattle (and sheep £8) .	54	13	3
Pigs . . .		—		Pigs . . .	9	12	4½
Rent . . .	334	14	0	Wheat . . .	96	14	0
Tithe, Taxes, etc.	43	16	4½	Cheese . . .	444	3	10
Wages . . .	65	19	0½				
Foodstuffs and other expenses	48	14	9½				
Cash increase .	111	19	3				
	£605	3	5½		£605	3	5½

CASH EXPENDITURE AND RECEIPTS ON A FARM OF ABOUT 190 ACRES.

April 1, 1922–March 31, 1923.

Expenditure.	£	s.	d.	*Receipts.*	£	s.	d.
Cattle . . .	566	0	6	Cattle . . .	448	3	9
Pigs	651	10	0	Pigs	970	14	8
Rent . . .	356	1	0	Milk	2,015	4	6
Rates, etc. . .	80	11	9	Sundries. . .	19	16	9
Wages . . .	740	18	5				
Foodstuffs . .	816	1	4				
Other expenses	171	13	8				
Cash increase .	71	3	0				
	£3,453	19	8		£3,453	19	8

the expenditure, while wages and the feeding-stuffs bill have grown enormously.

A display of ancient and modern dairying and cheese-making equipment and machinery was another pleasing feature of this exhibit, and no one could fail to be impressed by the great strides in efficiency which the application of science and invention has made possible in the dairy industry.

The Principal and Staff of the Cheshire School deserve great credit for the excellence of their exhibit, which succeeded in no small measure in combining the scientific and economic side of their investigations. It must have been gratifying to them that their efforts were rewarded by the evident interest shown by the visitors to the exhibit.

The Institute of Agricultural Engineering, Oxford, in conjunction with The Crop-Drying Company Ltd. had a demonstration exhibit of crop-drying by artificial means in the implement section of the show. Considerable interest was evinced in this demonstration. It was felt, however, that farmers have yet to be convinced that this apparatus is as effective and economical as the natural methods of crop-drying. Its value in wet seasons is undoubtedly considerable, but it is suggested that the apparatus should be used every year irrespective of weather conditions. It would have been a distinct advantage if details of the capital outlay and running cost of the equipment, as well as the additional costs consequent on the need for smaller stacks, had been given.

Agricultural Education exhibits have now been shown at the Society's annual show since 1903, and an examination of the reports since that date reveals the fact that very little, if any, advance has been made in the methods of communicating research investigations to the farmer. Reliance is still placed on the efficacy of a display of samples, charts, literature and personal explanation. While there are better methods available, it is a pity that the present ones still persist. During these years the use of the cinema as an educational device has increased rapidly, and the suggestion is now put forward that the time is ripe for the dissemination of agricultural education by this means, not only at the Society's Show, but at other shows up and down the country. The farming community is then assembled in large numbers, and the projection of educational matter on the screen would, it is considered, apart from the greatly increased facilities afforded for explanation, serve in every way to make Agricultural education a much more fascinating, stimulating and attractive study and amply justify the cost of the equipment.

A. Bridges.

Agricultural Economics Research Institute, Oxford.

THE FORESTRY EXHIBITION AT THE CHESTER SHOW, 1925.

As in former years the forestry exhibits were arranged in a special building with outdoor space near by for gates, fencing, tree guards and living trees. Six competitive classes were arranged for planks of home-grown timber, but exhibits were only made in four, whilst the competition was not very keen. The chief exhibitors were the Earl of Powis, Lord Harlech, Lord Penrhyn, Colonel Samuel Sandbach, the Dinam Estates Company, and Capt. J. M. Naylor. Most of the planks sent by the Earl of Powis were of outstanding merit and he was placed first in Classes 1 and 2, and second in Class 4. In the last-named class he exhibited five fine planks of Douglas Fir, Silver Fir, Cedar, *Sequoia gigantea*, and *Pinus Jeffreyi*, the last named being the narrowest with a width of 2 feet 11 inches. Had the number of planks in the class been limited, the quality of the timber would have placed this exhibit first, but the great variety of planks staged by Capt. Naylor just gained the major number of points. Other prize-winners in these classes were Lord Penrhyn with one first and two seconds, and Lord Harlech with one second.

Unfortunately all the timber exhibited in these classes appeared to have been cut from park, hedgerow, or garden trees, and there was nothing to demonstrate the possibilities of the several species when grown under forest conditions, and a class or classes for forest-grown timber might be worthy of consideration, for after all the object of these exhibitions is to demonstrate the practicability of producing at home, timber equal in quality to that imported from other countries, and this can be better done by exhibiting timber from forest-grown trees than from isolated specimens. At the same time a better impression would be made were the Council to insist upon the more careful preparation of specimens, *i.e.* squaring the ends of planks in order that they may stand erect, sawing all to a uniform length, and giving a better finish to planed surfaces. These are all points that appeal to an uninformed public.

The non-competitive exhibits were of considerable interest and there appeared to have been a genuine effort to get away from the all-too-common abnormal growths and other unimportant objects that often form a feature of Forestry Exhibitions. The best group was that exhibited by H.M. Forestry Commissioners. It filled several bays and included an exhibit illustrative of seven ages in the life of an Oak. Commencing with the seedling, the life history was carried through to mature timber cut into waggon scantlings. The scantlings were sent by a commercial firm and worthily represented the quality of well-grown British Oak. There were also models of an aerial wire-rope-way as used by the Commission for carrying timber across the Wye; a charcoal kiln; and a wood distillation plant with samples of the distillates. Relief maps of portions of the Crown Forests of Dean and Tintern Woods were exhibited with maps indicating the position and areas of the Commission's activities during the last five years. Specimens illustrating various stages in the production of artificial silk from spruce logs to manufactured articles created a good deal of interest. A wide selection of tool handles made from coppice wood was of considerable educational value. The exhibit was awarded the gold medal.

The National Museum of Wales, Cardiff, filled two bays with a miscellaneous collection, including photographs of fine trees grown in Wales, herbarium and timber specimens of various kinds of trees, Aspen and other woods for the manufacture of matches and match-boxes, various stages in the manufacture of artificial silk, from logs of Spruce and Poplar to a finished blouse and a pair of stockings; paper-making from wood pulp and other objects.

From the Forestry Department of the University College of North Wales was sent a dendograph, an instrument for making a continuous record of the changes in diameter of a tree, together with a chart showing the daily changes in the diameter of a Douglas Fir throughout the growing season of 1924 and part of 1925, together with temperature and rainfall records. Also a series of sections showing the mean diameter at five yearly intervals of two stems of Douglas Fir 35 and 40 years old respectively. A plan of the Cairiog Experimental area attached to the College was also shown. This and the previously described exhibit were awarded silver medals.

In the non-competitive section interesting exhibits were also made by the Hon. N. Orde Powlett, miscellaneous exhibits including coloured photographs; Sir Gerald Vincent Corbet, very good cleft fence pales and shingles; Mr. W. Craven Llewelyn, herbarium specimens, etc.; the Margam Estate, South Wales, miscellaneous collection; Messrs. Little & Ballantyne, Carlisle, examples of young trees; the Duke of Westminster, specimens of timber showing the effects of creosote; Mr. Russell Morrison, Morrison's Patent Universal Transplanter for Forest Tree Seedlings; Messrs. Trewhella Bros. Pty, Ltd., monkey winch tree and stump puller with photographs showing the machine at work.

Mr. Coltman-Rogers, the senior Steward of the Forestry Section, contributed an honorary exhibit of scientific interest.

This included numerous specimens of new Chinese Conifers from his famous collection at Stanage Park. Conspicuous amongst them were branches and foliage of the rare Chinese Silver Firs, *Abies Forrestii*, *A. recurvata*, and *A. Faxoniana*; an interesting Chinese Spruce, *Picea asperata*, with its varieties *ponderosa* and *notabilis;* cones produced at Stanage Park by some of these trees, and others contributed by Professor Sargent of the Arnold Arboretum. There were also cones produced at Stanage Park of the new Chinese Larch, *Larix Potaninii*. Mr. Coltman-Rogers also exhibited photographs of trees taken in Trinidad and Jamaica, a small collection of forestry tools and accessories, and several fungus diseases and insect pests harmful to forest trees.

Outside Messrs. Dicksons, Ltd., Chester, were awarded a silver medal in Class 15, for a very excellent collection of ornamental trees, chiefly Conifers. Unfortunately their names were not in all cases correct.

The classes for gates were well filled and some considerable difficulty was found in awarding the medals. Eventually in Class 7 for an Oak field gate, Major Robert Barbour was placed first and the Earl of Powis second. In Class 8, for a field gate of any other home-grown timber or combination of timbers, the Earl of Powis was placed first and the Dinam Estates Company second. For a wicket or hunting gate only one medal was offered: this was won by Major Robert Barbour. A bronze medal might well be offered in this class, for it attracted numerous competitors.

Class 10 for a tree guard attracted numerous entries, but both medals were awarded to the Earl of Powis. Several of the tree guards were too elaborate for general use, whilst some of the timber used was too weak for use in places to which powerful animals have access.

Class 11 for fencing attracted a number of entries which were difficult to judge, for they were of distinctly different types. Eventually both medals were awarded to the Dinam Estates Company for two types of strong, serviceable fencing. The fences exhibited by the Liverpool Corporation Waterworks Committee and by Sir Gerald Vincent Corbet, Bart., the former of split Larch and the latter of Ash, had much to commend them for woodlands and temporary work.

Classes 12, 13 and 14 did not fill. Messrs. Christy & Penny, Ltd., attracted many visitors by their petrol-driven "Wade" saw which was engaged in cutting transverse slabs from an Elm log.

Below is a list of the official awards:

COMPETITIVE CLASSES.

CLASS 1.—SPECIMENS OF OAK, ELM, ASH, AND BEECH TIMBER.

I. *Silver Medal.*—The Earl of Powis, Powis Castle, Welshpool.
II. *Bronze Medal.*—Lord Penrhyn, Penrhyn Castle, Bangor.
H.C.—Lord Harlech, Brogyntyn, Oswestry.

CLASS 2.—SPECIMENS OF LARCH, SPRUCE, AND SCOTCH PINE TIMBER.

I. *Silver Medal.*—The Earl of Powis, Powis Castle, Welshpool.
II. *Bronze Medal.*—Lord Penrhyn, Penrhyn Castle, Bangor.

CLASS 3.—SPECIMENS OF ANY OTHER SORT OF HARD WOOD OR BROAD LEAVED TIMBER.

I. *Silver Medal.*—Lord Penrhyn, Penrhyn Castle, Bangor.
II. *Bronze Medal.*—Lord Harlech, Brogyntyn, Oswestry.

CLASS 4.—SPECIMENS OF ANY OTHER SORT OF CONIFEROUS TIMBER.

I. *Silver Medal.*—Captain J. M. Naylor, Leighton Hall, Welshpool.
II. *Bronze Medal.*—The Earl of Powis, Powis Castle, Welshpool.
H.C.—Lord Penrhyn, Penrhyn Castle, Bangor.

CLASS 7.—OAK FIELD GATES FOR FARM USE.

I. *Silver Medal.*—Major Robert Barbour, Bolesworth Castle, Tattenhall, Chester.
II. *Bronze Medal.*—The Earl of Powis, Powis Castle, Welshpool.
H.C.—Dinam Estates Co., Llandinam, Mont.

CLASS 8.—FIELD GATES FOR FARM USE, OF ANY OTHER HOME-GROWN WOOD.

I. *Silver Medal.*—The Earl of Powis, Powis Castle, Welshpool.
II. *Bronze Medal.*—Dinam Estates Co., Llandinam, Mont.

CLASS 9.—WICKET OR HUNTING GATES.

I. *Silver Medal.*—Major Robert Barbour, Bolesworth Castle, Tattenhall, Chester.
H.C.—The Earl of Powis, Powis Castle, Welshpool.
H.C.—Lord Tollemache's Trustees, Estate Office, Bunbury, Cheshire.

CLASS 10.—TREE GUARDS.

I. *Silver Medal* and II. *Bronze Medal.*—The Earl of Powis, Powis Castle, Welshpool.

CLASS 11.—FENCING OF HOME-GROWN WOOD.

I. *Silver Medal* and II. *Bronze Medal.*—Dinam Estates Co., Llandinam, Mont.
H.C.—Sir Gerald Vincent Corbet, Bart., Acton Reynald, Shrewsbury.
H.C.—Liverpool Corporation Waterworks Committee.

CLASS 15.—NURSERYMEN'S COMPETITION FOR BEST EXHIBITS OF RARER SPECIMEN AND ORNAMENTAL TREES.

I. *Silver Medal.*—Dickson's Nurseries, Ltd., Chester.

NON-COMPETITIVE EXHIBITS.

Silver Medal.—Department of Botany, National Museum of Wales, Cardiff.
Bronze Medal.—The Hon. N. Orde Powlett, Bolton Hall, Leyburn, Yorks.

H.C.—Sir Gerald Vincent Corbet, Bart., Acton Reynald, Shrewsbury.
H.C.—W. Craven Llewelyn, Clydach, Glam.

Special Medal given by the R.A.S.E. for the best general collection of exhibits in the competitive and non-competitive sections was awarded to:—

His Majesty's Forestry Commissioners, 22, Grosvenor Gardens, London, S.W.1.

Reserve:—Department of Botany, National Museum of Wales, Cardiff.

W. DALLIMORE.

Royal Botanic Gardens,
Kew, Surrey.

REPORT OF THE JUDGES ON THE PLANTATIONS COMPETITION HELD IN CONNECTION WITH THE CHESTER SHOW, 1925.

OWING to Major Caccia, who was originally appointed one of the Judges, having found himself unable to act, some delay took place in starting the itinerary. A further difficulty was experienced in the fact that the closing date of entries had to be postponed owing to the small number coming forward, but eventually the number of entries proved much larger than usual. One difficulty the judges experienced was the fact that a very large area was included in the district which was eligible for competition, and not only were many of the estates widely separated, but on some of the single estates plantations entered were at wide distances apart. If the Judges might venture upon a recommendation they would suggest that the area for future competitions, especially those in well wooded districts, be considerably restricted. This suggestion is made less for the sake of the judges than for the sake of the entrants, as the experience this year was that landowners who entered plantations are extremely keen to hear the judges' actual discussion in the woodlands, and to secure such advice as they may be able to get, and they put themselves to considerable trouble to be present at the actual judging. Their agents and foresters were also, in every instance, keen to discuss points. When the area is large it proves impossible to give definite dates and times of arrival, and the landowners and their representatives are often put to considerable inconvenience by waiting, or in some cases being preceded by the arrival of the judges. It should be emphasised that in all cases in the present competition the landowners and their agents and foresters put themselves to very great trouble to accommodate themselves to the judges' times, and in many cases put themselves to great inconvenience to meet them. The Judges have to offer a further criticism of the rules, viz. the paragraph which refers to the desire and intention of the Council that plantations should be judged in their normal condition of management. They found in some cases that owners had deliberately postponed the cleaning, etc., of the woods in case they infringed this regulation. The Judges are also of opinion that it is perfectly legitimate for an owner to give some special attention to a plantation which he has entered for show or competitive purposes, as is done in the case of all exhibits at agricultural and other shows.

There were many notable features in the woodlands which were examined. One was that in some cases very young woodlands of not more than one or two years' growth from date of planting had been entered. In the case of such plantations, it is impossible to give an estimate of their value or even of their prospects of development. Another point to which attention should be called is that landowners found themselves in considerable difficulties in stating the exact cost of plantations, and the Judges were obliged to rather discount this particular regulation, as without a very complicated system of costings and book-keeping, it is clear that landowners cannot give a definite statement. In some cases the Judges used their discretion and eliminated some young plantations on estates where more than one of the same class was entered, and substituted others in different classes which they saw in their itinerary. The most striking feature of the whole competition was the extraordinary extent to which Douglas Fir had been planted in Wales within recent years. There is perhaps a considerable danger in the too extensive planting of one species, which is probably greater in the case of Douglas Fir than in any other. In the management of these plantations, the system seems to prevail by which pruning is done in a way which cannot be approved. Both Judges are agreed on the fact that in the successful rearing of Douglas Fir pruning is necessary, but it ought to be done by cutting the lower dead branches close in to the main stem with as clean a cut as possible and not leaving a snag of 6 in. or so long, as such a method leaves a large number of dead or black knots in the timber which is subsequently laid on by the main trunk. It was pointed out, when attention was called to this fact, that it would be easy to re-prune, but it is obvious that such a method merely doubles the cost. The Judges are strongly of opinion that a fine pruning saw is more effective than a bill-hook. Numerous plantations had suffered considerably through thinnings being postponed too long. This resulted in the trees being drawn up too much and the crowns being too small. The plantations consequently suffered loss of increment.

It is impossible to mention all the good points of the plantations inspected, but special mention should be made of the Leighton Hall Estate of Captain J. M. Naylor which secured the Gold Medal for the best plantation. This plantation, which is 25 acres in extent and thirty-seven years of age, consists of mixed species of Ash, Larch, Spruce and Sycamore. The Judges had no hesitation in making this award. The Ash is now the main crop and some are nearly 100 ft. high, while many are 70 ft. without a branch. The trees contain on an average 17 cu. ft. The Judges consider this one of the best examples of mixed woods seen. It must have received careful and practical management in its earlier stages. The Judges are of opinion that it is in need of judicious thinning now.

Considerable difficulty was experienced in awarding the Society's Special Gold Medal for the best managed estate as a whole as they differ so greatly in different places, but the final award was given to the Earl of Powis for the Powis Castle Estate, as this showed evidence of good present management as well as systematic management in the past.

The most notable trees on estates were those on the Powis Castle Estate, and also the Leighton Hall Estate. Gigantic Douglas Fir and other conifers, and also broad-leaved trees, testify to the capacity of the district for growing timber. A similar demonstration is seen in the plantations of the Dinam Estates Company, whose Governing Director is Mr. David Davies, M.P. As regards variety of well-grown trees, special mention should be made of the estate of Colonel Sandbach at Abergele, and of Major Barbour at Bolesworth Castle. On both estates very extensive collections of well-grown exotic and native trees were to be seen. These again give indications as to the timber-growing capacity of the district.

On the whole some specimens of excellent management were to be found. The main fault, as stated above, is to be found in the question of pruning and thinnings. The Judges wish to again express their thanks to those who entered the competition and who provided every facility for the carrying out of the work, which was undertaken under somewhat difficult circumstances. The Judges received special assistance by the kindness of Mr. Trench of the Penrhyn Estate Office, who lent the estate forester, Mr. Ferguson, who acted as guide and enabled the judging to be done in a much shorter time than would have been the case otherwise.

The official awards are as follows :—

HARDWOODS.

CLASS I.—*Plantations of less than Ten Years' Growth from date of Planting.*
Silver Medal.—Lord Penrhyn, Penrhyn Castle, Bangor.
Bronze Medal.—Lord Tollemache's Trustees, Bunbury, Tarporley.

CLASS II.—*Plantations which have undergone a First Thinning.*
No entry.

CLASS III.—*Plantations which have been Thinned Twice or Oftener.*
Silver Medal.—Dinam Estates Co., Llandinam, Montgomery.
Bronze Medal.—Lord Penrhyn, Penrhyn Castle, Bangor.

CONIFERS.

CLASS IV.—*Plantations of less than Ten Years' Growth from date of Planting.*
Silver Medal.—Sir Watkyn W. Wynn, Bart., Wynnstay, Ruabon.
Bronze Medal.—Lord Tollemache's Trustees, Bunbury, Tarporley.

CLASS V.—*Plantations which have undergone a First Thinning.*
Silver Medal.—(No entry worthy.)
Bronze Medal.—Dinam Estates Co., Llandinam, Montgomery.
Bronze Medal.—Liverpool Corporation (Waterworks Committee).

CLASS VI.—*Plantations which have been Thinned Twice or Oftener.*
Silver Medal.—The Dinam Estates Co., Llandinam, Montgomery.
Bronze Medal.—Major Robert Barbour, Bolesworth, Tattenhall, Chester.

MIXED PLANTATIONS OF HARDWOODS AND CONIFERS.

CLASS VII.—*Plantations of less than Ten Years' Growth from date of Planting.*
Silver Medal.—H. S. Williams Thomas, Parc Postyn, Denbigh.
Bronze Medal.—Captain J. M. Naylor, Leighton Hall, Welshpool.

CLASS VIII.—*Plantations which have undergone a First Thinning.*
Silver Medal.—Capt. W. Best, Vivod, Llangollen.
Bronze Medal.—Lord Justice Bankes, Soughton Hall, Northop, Flintshire

CLASS IX.—*Plantations which have been Thinned Twice or Oftener.*
Silver Medal.—Captain J. M. Naylor, Leighton Hall, Welshpool.
Bronze Medal.—Colonel S. Sandbach, Hafodunos, Abergele.

CLASS X.—*Plantations of not less than Two Acres, consisting of Douglas Fir, Sitka Spruce, Japanese Larch, Corsican Pine, or any other rarer Conifer, planted not less than Five Years.*
Silver Medal.—Major Robert Barbour, Bolesworth, Tattenhall, Chester.
Bronze Medal.—H. W. Buddicom, Penbedw, Nannerch.

CLASS XI.—*For the best Managed Woodlands on Estates of not less than 1,000 Acres in Area.*
Special Medal.—The Earl of Powis, Powis Castle, Welshpool.
Silver Medal.—Captain J. M. Naylor, Leighton Hall, Welshpool.
Bronze Medal.—Capt. W. Best, Vivod, Llangollen.

NURSERIES COMPETITION.

Silver Medal.—Lord Penrhyn, Penrhyn Castle, Bangor.
Bronze Medal.—Captain J. M. Naylor, Leighton Hall, Welshpool.

THE ROYAL ENGLISH ARBORICULTURAL SOCIETY'S GOLD MEDAL FOR THE BEST SINGLE PLANTATION.

Captain J. M. Naylor, Leighton Hall, Welshpool.

W. R. BROWN } *Judges.*
W. DAWSON }

REPORT OF THE JUDGES ON THE ORCHARD AND FRUIT PLANTATION COMPETITION, 1925.

(*Restricted to the Counties of Essex, Suffolk and that part of Norfolk lying East of the River Ouse.*)

CLASSES.

1. For the best managed orchard or orchards of standard or half-standard fruit trees of not less than 8 years growth on uncultivated ground, being not less than 3 acres and not more than 10 acres.

2. For the best managed orchard or orchards of standard or half-standard fruit trees of not less than 8 years growth on uncultivated ground, being over 10 acres.

3. For the best managed plantation of fruit trees of not less than 8 years growth on cultivated ground, being not less than 2 acres and not more than 5 acres.

4. For the best managed plantation of fruit trees of not less than 8 years growth on cultivated ground, being over 5 acres.

In the above classes trees may include all or any of the following varieties: Apples, Pears, Plums, Damsons, Cherries. In Classes 3 and 4, trees may be of any height.

5. For the best managed plantation of bush fruit of not less than 4 years growth, being not less than 2 and not more than 5 acres.

6. For the best managed plantation of bush fruit of not less than 4 years growth, being over 5 acres.

7. For the best managed plantation of strawberries of any age, being not less than 1 acre and not more than 3 acres.

8. For the best managed plantation of strawberries of any age, being over 3 acres.

Prizes of, first, silver medal, and second, bronze medal, were offered in each class.

Judging commenced in Essex on June 8 and was completed in Norfolk on June 12. The weather continued fine throughout the week and we were able to keep well up to time with the arrangements made by the Secretary of the Federation of British Growers, Mr. E. C. Boughton, who was responsible for the exceedingly well-planned itinerary.

The entries numbered 32:

Class 1	1
„ 2	2
„ 3	5
„ 4	7
„ 5	5
„ 6	7
„ 7	1
„ 8	4

The method of scoring marks was as follows:

	Points.
(*a*) System of planting	15
(*b*) Pruning and shape	10
(*c*) General vigour and productiveness	15
(*d*) Freedom from pests and diseases	15
(*e*) Land cultivation, having regard to the profitable use of the ground	15
(*f*) Selection of varieties	5
(*g*) Economical and commercial aspect	15
(*h*) General appearance	5
(*i*) Fencing and protection	5
Total	100

In the case of strawberry plantations, items (*b*) and (*c*) were treated as vigour and productiveness.

In making the following awards we were unanimous in our selection of the winning exhibits:

CLASS 1. *First.* Col. B. J. Petre, Westwick House, Norwich. A plantation of half-standard apples 18 ft. by 18 ft. square, 15 years planted. The land has been under cultivation for a number of years, but is now sown with forage crops for pig grazing; the plantation being divided up into 1-acre pens. Allington Pippin was most prominent in this orchard, hard pruning of this variety producing good results. Worcester Pearmain and Lord Derby were not up to such standard, canker being prevalent in both varieties.

CLASS 2. *First.* Col. B. J. Petre, Westwick House, Norwich. A grass orchard of cherries, 30 ft. by 30 ft., planted 1911. The orchard is planted in the poorer soil on this estate, but has cropped heavily. The trees are healthy, vigorous, and of uniform appearance throughout. Chief among the varieties were noted Napoleon, Waterloo, Rivers, and Bigarreau. Attacks of winter moth caterpillar were noticeable in parts of the orchard. We consider more attention might be given to closer grazing with sheep earlier in the season.

Second. The other entry in the class was not, in our opinion, of sufficient merit to make a second award.

Class 3. *First.* Mr. E. Granger, "Appledene," Eastwood, Southend-on-Sea. A well-cultivated plantation of 4¾ acres on a 7-acre holding. The trees are closely planted, but are of good shape and well managed under these conditions. The land is very clean and in an excellent state of cultivation—scoring maximum points under this head. There were patches of Purple Aphis and Red Spider in apples.

The crop outlook here was extremely good, with the exception of pears. Cox's Orange Pippin was most promising.

Second. Mrs. J. C. Blofeld, Hoveton Fruit Farm, Wroxham, Norfolk. A 5-acre plantation of half-standards 36 ft. square interplanted with bush trees at 18 ft. square, 14 years old. The half-standards consist of Bramley, Blenheim Orange, and Annie Elizabeth, the bush trees—Lord Derby and Lanes. Bramley Seedling was outstanding in vigour, shape, and crop, but all trees were of excellent uniformity as regards pruning and management. Apple Mildew was prevalent in Lord Derby and Lanes, and again Red Spider was noted.

Cultivation was fair, the soil round the trees having been mulched with "marsh fodder," which appears to have introduced a quantity of dock and other weed seed to the soil.

The entry at Roydon, Essex, in this class, was disqualified, as the land was not under cultivation as specified in the schedule.

Class 4. *First.* Hollesley Bay Labour Colony, Hollesley, Suffolk. A fruit farm of 200 acres in a high state of cultivation and productiveness. Conditions here, especially in regard to soil, are of a different nature than on any farm inspected in the Competition. The soil is very light and sandy—almost pure sand in parts. Tree growth is consequently very much restricted, and the close planting of 12 ft. by 12 ft. and 12 ft. by 6 ft. is suited to these conditions. In spite of the dwarfing effect, however, the foliage at the time of our visit was of very striking appearance in health and vigour. Bramley Seedling, Lord Derby, Cox's Orange, and Lanes, were all bearing crops above the average. It is worthy of mention that Bramley has cropped heavily annually on this farm for a number of years.

To the frequent working of this sandy soil, thorough attention to spraying and the probability that the water table is high, we attribute largely the healthy appearance of the trees and the crops obtained. Cultivation is by tractor-drawn cultivators, some several* inches of the surface being worked into a dust mulch—there being ample evidence in the leaf alone of the moisture thus conserved. Brown Rot was observed in apples in parts of the plantation, but other diseases and pests had been successfully controlled by early attention to spraying. Although it might appear that abnormal conditions exist, we are confident that the economical and commercial aspect of this fruit farm is all that could be desired.

Second. Mr. W. E. Wadley, Bovingtons Farm, Hatfield Peverel, Essex. A mixed planting of 30 acres, of apples, pears, plums and cherries as top fruit, with bush or soft fruits under. There are well-managed trees of Blenheim Orange, Conference pears, Rivers, Czar and Victoria plums, and Morello cherries. Of pests, leaf-eating caterpillars had done considerable damage in places, more so among cherries, but generally health and vigour over the whole farm was of a high standard of quality. Spraying had been well done and cultivation clean. Crop over all varieties fair.

Reserve. Col. B. J. Petre, Westwick House, Norwich. A large holding of mainly standard and half-standard apples, pears, and plums. Of apples, Lord Derby is evidently not doing well here. Canker was very rife in both this and Worcester Pearmain. Allington Pippin was outstanding in health and bearing. Cultivation has recently been discontinued in favour of pig grazing.

Highly Commended. Mr. W. Lawrence Taylor, Galleywood, Chelmsford. A 12-acre plantation planted in 1912 at the 12 ft. by 12 ft. distance. The trees are of good shape and uniformity. Pruning has been done on the hard-spur principle for some time. Of pests and diseases, Woolly Aphis, Sawfly, and Mildew were a good deal in evidence in parts of the plantation—the more serious were the attacks of Sawfly as noted in other plantations in the Chelmsford district. Pigs are grazed under the trees in suitable size pens, and we suggest that, where there is a lack of natural grasses and weeds, better results might be obtained if quick-growing forage crops were sown for grazing.

CLASS 5. *First.* Major E. H. Evans-Lombe, Marlingford Hall, Norwich. A 4-acre plot of black currants, part 5 years' and part 4 years' growth. A portion are planted 7 ft. by 3½ ft., and the remainder 6 ft. by 3 ft. The variety, except for a few Boskoop, is of the French type, selected and raised from soft wood cuttings. A close examination of the plot revealed two reverted bushes, but the general health and vigorous nature of the whole piece was extremely good, and the uniform appearance of the crop very marked. The bushes produced 2 tons per acre in 1924, and were again carrying nearly that amount.

We consider the true selection of the stock or strain has much to do with this uniformity of weight per bush. Carbo washes had been applied with beneficial results. The soil in this plantation is on the heavy side in parts, and not considered so good as in other currant-growing districts in the county. For the first dressing of farmyard manure, 4 tons had been applied, followed by 10 tons in the second year and 15–20 tons per acre the third year. A well-managed plantation of much promise.

Second. Lieut.-Col. G. E. Todd, Mundham House, Brooke, Norwich. A 3½-acre plot consisting of 3 acres black currants and ½ acre raspberries. The black currants (Seabrooks), planted 6 ft. by 6 ft., were in a good state of vigour and fair productiveness, although we would suggest an increase in the quantity of bulky organic manures applied. Aphis attacks were common in places.

Of raspberries, the variety Lloyd George was of outstanding merit. The canes had been kept well thinned to suitable distances, as is necessary with this variety. The inexpensive method of supporting the canes with one strand of Government wire was unique. The crop was promising and above average.

Reserve. Col. B. J. Petre, Westwick House, Norwich. Three acres of red currants, planted 6 ft. by 6 ft. under standard apples. Hard pruning adopted with good results. The bushes were bearing a very heavy crop, and we were given to understand they had done so annually for some years.

Cultivation was neglected, but frequent applications of liquid manure had compensated this to a marked degree and no doubt produced these abundant and highly profitable crops.

CLASS 6. With one exception, all entries in this class consisted of black-currant plantations.

First. Mr. George S. Durrell, West End Lodge, Aylsham, Norfolk. Five acres of Seabrooks (owner's own selected strain) and Boskoop black currants, on the 8 ft. by 4 ft. distance, planted 1921 as cuttings. The healthy vigour and productiveness of this batch of bushes was an outstanding feature of our tour of the various districts. The bushes were bearing a heavy crop of very fine fruit, estimated at 3½ tons per acre.

The land was exceptionally clean and in a high state of cultivation, having received heavy dressings of farmyard manure from the owner's dairy herd. Carbo wash was applied early in January. A credit to the owner's management. The entry gained 98 points from a possible 100.

Second. Col. B. J. Petre, Westwick House, Norwich. Seven acres, Baldwin, French, and Boskoop black currants, 5 years old, 6 ft. by 3 ft. The Boskoop bushes were over 6 ft. in height, and we consider a little too closely planted for this variety. We would suggest another 1 ft. 6 in. to 2 ft. between the rows. Cultivation and manuring had been kept up to a very high standard. The bushes were bearing a lighter crop, and some running off was noticed in Boskoops. The piece, however, had averaged a crop to the extent of 4 tons per acre for the two previous years. On this farm the selection of true strains of the different types has been closely followed for some years, the freedom from rogues and the general uniform appearance of the various varieties being the result of such treatment.

Reserve. Mr. H. Callow, Neatishead, Norfolk. Black currants (French), 8 ft. by 4 ft. plant. These bushes were of vigorous growth, the land well cultivated and in good condition. The crop was, however, light, irregular, and in some cases only the upper parts of the branches were bearing fruit. Some reversion was observed.

Highly Commended. Messrs. Tyler Bros., Hall Farm, Southrepps, Norwich. Eight-acre plantation of black currants, planted 6 ft. by 4 ft. Varieties included Naples, French, Boskoop, and Baldwin. The two last named were superior in productiveness and general appearance to the others. Cultivation very good. The prevalence of caterpillar was noted.

Class 7. *First.* Mr. Charles J. Page, Old Rectory Fruit Farm, Goldhanger, Maldon. A 2-acre plot of strawberries. A little irregular in vigour and uniformity of growth, the plant was a little packy at one end with some gaps and blind plants. Spring cultivation might have been continued later with benefit to the plants. This was the only entry in the class.

Class 8. *First.* Mr. W. E. Wadley, Bovingtons Farm, Hatfield Peverel, Essex. A 30-acre field of Royal Sovereign and Paxtons strawberries, varieties which apparently suit this neighbourhood. The health and vigour of the plants was very good considering the unsuitable and trying conditions experienced during the winter months for strawberries generally.

Some red plant and occasional weak spots were noticeable. Cultivation and littering well done. Commercial aspect very good.

Second. Mr. H. G. Evans, Pleyhill, Hatfield Peverel, Essex. About 4½ acres Royal Sovereign strawberries under bush apple trees. Strong and healthy plants. One interesting piece contained alternate rows of autumn and spring planting. Cultivation very good, littering perhaps a little thin. A few gaps caused by red plant in parts of the plantations.

A portion of the strawberries were single rows between bush apples, which in our opinion, considering the young age of the trees, left too much unnecessary vacant land, and two rows might have improved the economical and commercial aspect—otherwise a promising batch of strawberries.

The marks gained by each competitor were as follows :

Class.	No.		Award.	*a.*	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*	Total
I	1	Col. B. J. Petre .	I	15	8	12	10	12	5	13	3	5	83
II	3	Col. B. J. Petre .	I	15	8	13	13	12	5	14	4	5	89
	2	J. B. Chevallier .	No Award	12	7	5	10	0	1	5	1	1	42
III	5	E. Granger . .	I	12	10	14	12	15	4	13	4	4	88
	4	Mrs. J. C. Blofeld	II	12	10	12	12	13	5	12	4	4	84
	6	Col. B. J. Petre .						Wi	thd	r a	wn.		
	7	Lt.-Col. G. E. Todd		12	10	10	12	13	5	12	4	4	82
	8	Major J.E. B.Wells			Dis	qua	li fi	e d	(un	cu l	ti v	ate	d)
IV	11	Hollesley Bay Lab. Col.	I	12	9	15	14	15	5	15	4	4	93
	15	W. E. Wadley .	II	12	10	12	14	15	4	14	5	4	90
	13	Col. B. J. Petre .	Res.	12	11	11	10	10	5	14	4	4	81
	14	W. L. Taylor . .	H.C.	12	10	10	12	8	5	14	4	4	79
	10	Mrs. Blofeld . .		12	11	10	9	9	4	12	4	4	75
	9	Lt.-Col. R. C. Batt		12	12	10	8	9	4	12	3	4	74
	12	C. J. Page . .		10	10	11	9	9	4	12	3	4	72
V	17	E. H. Evans Lombe	I	14	10	12	14	15	5	14	5	5	94
	20	Lt.-Col. G. E. Todd	II	14	8	10	14	14	5	12	4	4	85
	18	Col. B. J. Petre .	Res.	12	8	10	14	8	5	10	3	4	74
	16	Mrs. Blofeld . .		12	9	8	12	10	5	9	4	4	73
VI	23	G. S. Durrell . .	I	14	10	15	15	14	5	15	5	5	98
	25	Col. B. J. Petre .	II	12	10	14	15	14	5	15	4	5	94
	22	H. Callow . . .	Res.	12	10	12	14	14	5	14	4	5	90
	26	Tyler Bros. . .	H.C.	12	9	12	14	14	4	12	4	5	86
	21	Lt.-Col. R. C. Batt		12	9	12	12	13	5	12	4	5	84
	24	C. A. Mileham .		12	8	10	12	12	5	10	4	5	78
	27	W. E. Wadley .		10	8	10	9	10	5	10	3	5	70
VII	28	C. J. Page . .	I	15	20	10	—	7	5	10	6		73
VIII	32	W. E. Wadley. .	I	15	20	12		14	5	15		8	89
	31	H. G. Evans . .	II	14	20	10		14	5	15		6	79
	30	J. B. Chevallier .		15	18	10		12	3	12		7	77
	29	Mrs. Blofeld .		15	18	12		12	3	10		5	75

GENERAL.

The apple crop as observed over the whole of the plantations and orchards visited we consider good, although not on the heavy side. Of varieties Bramley Seedling, Allington, Blenheim, and Cox's Orange Pippin were mostly prominent in both quantity and promise of good quality fruit. From our observations it appears likely to be a good year for Cox's Orange in the Eastern Counties.

Pears, except for a few isolated fair crops of Conference, were practically a complete failure, owing in some cases to the ravages of the pear midge.

Plums, after such a promising outlook at the blossoming period, we regret to report are a disappointing crop. There were noted some fair crops of Czars and Victorias, but on the majority of trees everywhere we went the fruit had dropped.

Of the soft fruits the few raspberries met with were bearing well, but had the appearance that moisture would be required to swell the fruit.

Black currants, to which most of our attention in the bush-fruit classes was confined, were generally a light crop, probably half of the 1924 average. Individual plantations in Norfolk, nevertheless, were carrying a heavy weight of fruit. Running off had accounted for much of the loss in other places—the bunches showing signs of having been reduced of half their berries. In mentioning Norfolk our attention is drawn to the development of black-currant culture in this county—with results unattained elsewhere.

We feel that great credit is due to those growers and the County Horticultural Adviser who have worked co-operatively on progressive and scientific lines to develop this important and profitable branch of fruit-growing. We were astonished in several instances to meet with the amount of skilled management and high standard of culture such as was being given to this crop. Further, we wish to congratulate those who have patiently raised by careful selection and rogueing many of their own true strains of varieties, with results that are at once striking.

Strawberries were a small entry in the classes confined to this fruit.

Old plantings had suffered considerably from the effects of a wet winter and early spring, and showed signs of loss of vitality. Weak crowns and patches of "red plant" were noticeable. The season pointed to a short one.

Young plants of Royal Sovereign were, on the whole, very good. We consider this variety is more suitable to the Norwich area than Paxton, from what we observed when comparing the two varieties side by side.

CULTIVATION AND PESTS CONTROL.

As far as the cultivation of plantations is concerned, we found that there is an increasing tendency to run pigs under the trees in place of clean cultivation. With this system it would appear that fencing off in small pens of from 1 acre to 2 acres ensures better results and closer grazing of weeds, etc., where, of course, the acreage is not too large to be economically done.

We would suggest the possibilities attached to the system of seeding down and frequent mowing of the grass as a sod-mulch culture.

On the very light soils of East Suffolk the constant working of the surface into a soil mulch is obviously correct to retain moisture in dry seasons. As regards the control of pests and diseases, the use of carbo washes had been general. With pests we found that Aphis and Caterpillar attacks had not been recognized sufficiently early by a few growers to be got under absolute control.

We regret to report the presence of considerable Sawfly in the Essex plantations, and a serious amount of Blossom Wilt in Lord Derby apples near Norwich. In the latter area we were also somewhat surprised to see canker so bad in Worcester Pearmain. Brown Rot was noted among diseases in apples and Victoria plums.

In bush fruits we are pleased to report that the majority of black-currant growers had successfully controlled Aphis and Caterpillar attacks, and in the prize plantations the absence of Reversion and Big Bud is also pleasing.

In conclusion we wish to tender our very best thanks to those gentlemen who kindly provided us with hospitality and entertained us, and also gave much time conveying us to and from railway stations and round to the various farms.

Our thanks are also due to the Competitors who assisted in every way in conducting us round their farms, and to Mr. E. C. Boughton for organizing the tour of inspection.

C. S. SMITH.
A. WHITING.

REPORT OF THE COUNCIL TO THE ANNUAL GENERAL MEETING OF GOVERNORS AND MEMBERS OF THE SOCIETY,

HELD AT THE

ROYAL AGRICULTURAL HALL, ISLINGTON, LONDON, N.,

On WEDNESDAY, December 9, 1925, *at* 2.30 *p.m.*

Membership.

1. The Council have to report that the list of Governors and Members has undergone the following changes since the Annual General Meeting on December 10, 1924: 32 new Governors (including 11 transferred from the list of Members under Bye-law 9), and 1,122 new Members have joined the Society, and 8 Members have been re-instated under Bye-law 14; whilst the deaths of 8 Life Governors, 7 Governors, 4 Honorary Members, 90 Life Members, and 175 Members have been reported. 1 Governor, 15 Life Members and 55 Members have been struck off the books under Bye-law 12, owing to absence of addresses; 1 Governor and 218 Members under Bye-law 13, for arrears of subscription; 5 Governors, 3 Life Members, and 320 Annual Members have resigned.

2. Losses by death include one Trustee and two other Mem-

bers of the Council. Sir J. B. Bowen-Jones, Bart., who was in his 85th year, was the "father" of the Council. Becoming a member in 1867, he was elected to the governing body in 1871, and for more than half a century served the Society in various offices. In different departments of the Annual Show he acted as a Steward on many occasions between the years 1881 and 1914. He took a share in the work of several of the Standing Committees, and was one of the original Members of the National Agricultural Examination Board. For a number of years he was Chairman of the Chemical and Woburn Committee. He was elected a Vice-President in 1905, a Trustee in 1909, and filled the office of President in 1919 for the first Show after the War, at Cardiff, which will be remembered as the most successful of the whole series held up to that time.

3. The late Walter William Chapman joined the Society as a Member in 1881, and was elected a Governor in 1913. He represented on the Council the electoral district of London from 1913 until his decease. As an agricultural journalist, and as a shipper and exporter of live stock, he was well known, and he was an industrious worker in the cause of animal breeding and its improvement. He was secretary of the National Cattle and the National Sheep Breeders' Associations, and was associated with several of the flock book societies.

4. The late C. Howard Taylor first became connected with the Society as a Member in 1888. He had served on the Council since 1918 as one of the representatives of the West Riding of Yorkshire.

5. Amongst other Governors and Members whose loss by death the Society has to deplore are: His Grace the Duke of Rutland, K.G., the Earl of Portsmouth, Viscount Leverhulme, Lord Barrymore, Lord Blyth, Lord Ribblesdale, Lord Roundway, Lord Sheffield, Lord Waleran, Sir R. J. Black, Bart., Sir Bache Cunard, Bart., Sir John F. Dillon, Bart., Sir G. A. C. East, Bart., Sir E. G. B. Palmer, Bart., Sir R. N. Rycroft, Bart., Sir David L. Salomons, Bart., Sir Eyre Coote, Sir H. Rider Haggard, Sir E. A. Hambro, K.C.V.O., Sir Edward E. Pearson, Major Sir H. J. P. Thomas, O.B.E., Mr. William Arkwright, Mr. James Cooper, Colonel F. H. Custance, C.B., Mr. Alfred E. W. Darby, Mr. Edward Drewry, Mr. T. W. Everard, Major J. P. Fell, Mr. W. T. Garne, Mr. Matthew Gray, Mr. John Handley, Mr. Oswald Harrison, Mr. Walter F. Ingram, Mr. C. H. Jolliffe, Señor Alfredo Le Cocq (Honorary Member), Prof. G. D. Liveing, F.R.S. (Honorary Member), Mr. John W. Macfie, Mr. William Parlour, Mr. C. S. Peirse-Duncombe, Mr. E. J. Powell (Honorary Member), Monsieur Henry Sagnier (Honorary Member), Mr. Arthur W. Sutton, Colonel B. T. L. Thomson, Mr. J. H. Toppin and Mr. F. B. Wilkinson.

Numbers of Governors and Members.

6. The above and other changes bring the total number of Governors and Members now on the Register to 13,620, divided as follows:—

293	Annual Governors;
157	Life Governors;
10,992	Annual Members;
2,161	Life Members;
17	Honorary Members;

13,620 Total number of Governors and Members as against a total of 13,371 on the Register at the time of the last Annual Report.

Presidency.

7. The Council have unanimously decided to recommend to the Annual Meeting the election of Lord Desborough, G.C.V.O., as President of the Society, to hold office until the Annual Meeting in 1926.

Changes in the Council.

8. Col. E. W. Stanyforth has been elected a Trustee in the room of the late Sir J. B. Bowen-Jones. Mr. William Harrison has been appointed to fill the vacancy thus created in the list of Vice-Presidents. Owing to his decision to reside abroad, Mr. A. M. Montgomery has resigned his seat as one of the representatives of Scotland.

Annual Election of Council.

9. Members of Council who retire by rotation at the next Annual Meeting are those representing the electoral districts of Group B, which comprises Buckinghamshire, Devon, Durham, Essex, Herefordshire, Leicestershire, London, Nottinghamshire, Rutland, Shropshire, Suffolk, Surrey, Wiltshire, Yorkshire West Riding, and South Wales. Governors and Members in those districts have been communicated with, and the usual procedure is being followed for the election or re-election of representatives for the divisions concerned.

10. Elections are also taking place for the filling of vacancies in Scotland, where Mr. Montgomery has resigned, and in Lancashire owing to the election of Mr. William Harrison as a Vice-President. Governors and Members in Lancashire are also entitled to elect one additional representative, and those in Cheshire two additional representatives, under Bye-law 149.

Dates of Council Meetings.

11. The Council will meet upon the following dates in 1926: February 3, March 3, March 31, May 5, June 2, July 7 (General

Meeting of Governors and Members in Reading Showyard), July 28, November 3, December 8 (Annual General Meeting at the Royal Agricultural Hall).

Accounts.

12. In accordance with the Bye-laws, the balance-sheet has to be presented for consideration at the Annual Meeting. The Council therefore beg to submit the Balance-sheet, with Statement of Receipts and Payments for the year 1924. These Accounts were published in Vol. 85 of the JOURNAL issued to Governors and Members this year, having been certified as correct by the Auditors appointed by the Members and by the professional Accountants employed by the Society.

Gilbey Lectureship.

13. The Council have agreed to continue Sir Walter Gilbey's Lectureship to the University of Cambridge, and a new current account has been opened at the Westminster Bank styled the "Gilbey Bequest" account representing accumulated income and funds uninvested.

Chester Show.

14. Taken as a whole, few finer exhibitions of the kind can have been brought together than the 84th Annual Show of the Society which took place at Chester from the 7th to the 11th July last. The site at Saltney with its view of the Welsh Hills was most picturesquely situated, and was admirably adapted to the Society's requirements.

15. With the exception of an isolated outbreak of Foot and Mouth disease which occurred in the neighbourhood of Hull in the week preceding the Show, the country had for some time enjoyed a clean bill of health, so that exhibitors were not hampered by restrictions in sending their animals to Chester. With an entry of 1,565, Cattle set up a new record. Entries of Sheep were greater than in the previous year at Leicester, but there was some falling off in the numbers of Horses and Pigs shown.

16. The Implements and Machinery section was of the customary representative character, and most of what may be termed the "side-shows" reached a high standard of excellence, particularly the Horticultural Exhibition, which was generally agreed to have been "better than ever."

17. For the second time, Sir Gilbert Greenall filled the dual rôle of President *and* Honorary Director. He was also Chairman of the Executive of the Chester Local Committee.

18. His Majesty the King, who was the guest at Knowsley of the Earl and Countess of Derby, honoured the Show with his presence on the second day (Wednesday), travelling by motor to Chester. His Majesty, whose reception was of a most enthusiastic character, made an extensive tour of the Show, seeing exhibits in

almost every department. Cheshire Cheese was the outstanding feature of the Produce section, and the entries, numbering 293, made a magnificent display. These exhibits were inspected by His Majesty who was graciously pleased to accept a cheese made by Mr. and Mrs. Charles Parton, of Haughton, Tarporley, which gained the Championship Cup, value 100 guineas, given by the Cheshire Hunt.

19. A message was subsequently received by the President expressing His Majesty's thanks for the arrangements made for his visit and the pleasure he derived from it.

20. Fine weather prevailed throughout the five days, during which a total of 112,880 persons visited the exhibition, and the accounts to be presented to the Annual Meeting will show a surplus of Receipts over Expenditure amounting to £344 14*s.* 7*d.*

21. At the General Meeting in the showyard the cordial thanks of the Governors and Members were tendered to the Mayor and Corporation for their hospitable reception of the Society, and to the Chester Local Committee for their untiring efforts to promote the success of the Show.

Railway Concession.

22. Since 1919 repeated applications have been made to the Railway Clearing House that they would restore to Governors and Members the pre-war privilege of travelling to and from the Show at reduced fare. Application was again made, in connection with the Chester Meeting, in the early part of this year—and again refused. The Railway Companies, however, gave the matter further consideration, and in June an intimation was received from the Railway Clearing House to the effect that the Companies in conference had agreed, as an experiment for the Chester Show, to issue tickets for the double journey (minimum fare 5*s.*) at a single fare and a third. Every Governor and Member was thereupon supplied with the necessary voucher to secure this privilege. The Council trust that the result of this year's experiment was sufficiently satisfactory to the Railway Companies to induce them to renew the concession to Governors and Members of the Society for future shows.

Plantations and Estate Nurseries.

23. Cheshire and North Wales comprised the area of this year's competition, for which 83 entries were received. The Society's Special Medal for the best managed Woodlands on an estate of not less than 1,000 acres was won by the Earl of Powis. The Gold Medal of the Royal English Arboricultural Society for the best plantation was awarded to Capt. J. M. Naylor, of Leighton Hall, Welshpool.

24. Next year's competition will cover Hampshire, Wiltshire, Dorset, Berkshire, and the Isle of Wight.

Orchards and Fruit Plantations.

25. The area of this competition in 1925 took in Essex, Suffolk and that part of Norfolk lying east of the River Ouse. There were thirty-two entries in the eight classes.

26. Cornwall, Devon and Somerset will be included in the area of the competition of 1926.

27. The Judges' reports on both the Plantations and the Orchards competitions of this year will appear in the next issue of the JOURNAL.

Demonstration Fruit Plot.

28. In order to demonstrate a practical scheme of planting likely to appeal to farmers and smallholders, the Council arranged with Dicksons Nurseries Ltd. to lay out a half-acre plot in the Chester showyard illustrative of (1) a fruit orchard in grass, (2) an orchard under cultivation for bush fruits, (3) the cultivation of soft fruits, and (4) the under-cropping of fruit trees with vegetables. Methods of protecting trees against stock and rabbits were also shown on the plot.

Skilled Labour and Long Service.

29. Through the agricultural societies of Leicestershire, Warwickshire, Rutland, and Berkshire, medals and certificates were awarded in February last to farm servants in those counties for proficiency in Ploughing, Hedging, Rick Building, and Thatching, and for Long Service, under the scheme drawn up by the Council in 1924.

30. For the present year medals and certificates are being offered through local societies in Cheshire and North Wales.

Trials of Sugar-Beet Lifters.

31. The Trials organised by the Society took place at Kelham, near Newark, on October 13, on land placed at the Council's disposal by Homegrown Sugar Ltd. There was one entry in the class for machines that will top and lift the roots and separate them from the leaves and crowns, and five of machines that merely loosen the roots, leaving them to be lifted and topped by hand.

32. The awards of the Judges are as under:—

Class 1. No award.
Class 2. 1st Prize (£20), John Cooke & Sons (Lincoln), Ltd., Lindum Works, Lincoln.
2nd Prize (£10), George Stephenson & Sons, Ltd., Trent Bridge Works, Newark.
Reserve, James & Frederick Howard, Ltd., Bedford.

A Special Prize of £20 has been awarded to Messrs. John Fowler & Co. (Leeds), Ltd., for their Cable-operated Beet Lifter.

The Judges' Report on the Trial will appear in the next number of the JOURNAL.

Next Year's Show.

33. The Eighty-fifth Annual Exhibition of the Society will take place at Caversham, Reading, from Tuesday, July 6, to Saturday, July 10.

Judging.

34. At their meeting in July last the Council agreed to discontinue the appointment of Assistant Judges which was tried as an experiment at Chester, and to adopt the principle of single judging. In the case of a breed having very large entries, one judge will be appointed for the males and one for the females.

Prize-List.

35. Including Cups, etc., the total value of the prizes to be offered will be about £16,000, towards which the Reading Local Committee will contribute £1,648. Offers of Champion and other prizes have been received from the following:—Shire Horse Society, Clydesdale Horse Society, British Percheron Horse Society, Hunters' Improvement and National Light Horse Breeding Society, National Pony Society, Shetland Pony Stud Book Society, Shorthorn Society, Hereford Herd Book Society, Sussex Herd Book Society, Welsh Black Cattle Society, Aberdeen-Angus Cattle Society, English Aberdeen-Angus Cattle Association, Argentine Aberdeen-Angus Association, Dun and Belted Galloway Cattle Breeders' Association, Dairy Shorthorn Association, Devon Cattle Breeders' Society, South Devon Herd Book Society, Blue Albion Cattle Society, English Guernsey Cattle Society, English Jersey Cattle Society, British Kerry Cattle Society, Dexter Cattle Society, Co-operative Wholesale Society, Oxford Down Sheep Breeders' Association, Shropshire Sheep Breeders' Association, Hampshire Down Sheep Breeders' Association, Suffolk Sheep Society, Wiltshire or Western Horn Sheep Breeders' Association, Ryeland Flock Book Society, Kerry Hill (Wales) Flock Book Society, Lincoln Longwool Sheep Breeders' Association, Leicester Sheep Breeders' Association, Wensleydale Longwool Sheep Breeders' Association, Kent or Romney Marsh Sheep Breeders' Association, Exmoor Horn Sheep Breeders' Society, National Pig Breeders' Association, British Berkshire Society, Large Black Pig Society, Lincolnshire Curly Coated Pig Breeders' Association, Cumberland Pig Breeders' Association, Wessex Saddleback Pig Society, Welsh Pig Society.

Special Prizes are being contributed in the Poultry section by the Sussex Poultry Club, Columbian Wyandotte Club, British Rhode Island Red Club, British Black Leghorn Club.

Closing of Entries.

36. Intending exhibitors at Reading are reminded that the latest date for receiving entries of horses, cattle, goats, sheep,

and pigs is May 1. Entries of Produce close on May 20; entries of Poultry close on May 31.

Applications for space in the Implement, etc., Department must be made not later than March 20.

Schedules and entry forms will be ready for issue early in the New Year.

Show of 1927.

37. The Council have accepted an invitation from the Mayor and Corporation of Newport, Monmouthshire, to hold the Show in that town in the year 1927.

Invitations for 1930 and 1931.

38. A resolution has been unanimously adopted by the Manchester City Council requesting the Lord Mayor to invite the Society to hold their Meeting for 1930 in Manchester. An invitation has also been received from the Corporation of Warwick to hold the Show in that place in 1931, this being the Centenary of the Warwickshire Agricultural Society.

Judges for South American Shows.

39. The following gentlemen were appointed by the Council, at the request of the Argentine Rural Society, to proceed to South America to act as Judges at that Society's Palermo Show, which on this occasion was attended by H.R.H. the Prince of Wales:—

Shorthorn.—W. S. McLaren, Naemoor, Rumbling Bridge.
Hereford.—E. Craig Tanner, Eyton-on-Severn, Cross Houses, Salop.
Aberdeen-Angus and Clydesdale.—D. M. Allen, Ballintomb, Grantown-on-Spey.
Lincoln Sheep, Blackface Sheep and Shire Horses.—F. Arthur Good, Stone Pit House, Potter Hanworth, Lincoln.
Pigs.—R. J. Purvis, Keinton Mandeville, Lydford-on-Fosse, Taunton.

40. The following letter, accompanied by a Silver Medallion, has been received:—

SOCIEDAD RURAL ARGENTINA,
FLORIDA 460,
BUENOS AIRES.

2 *September*, 1925.

To the Secretary of the Royal Agricultural Society of England.

DEAR SIR,—

On the occasion of the return home of the British Judges who officiated at the Palermo National Show, which opened on the 21st of August, H.R.H. the Prince of Wales honouring us with his presence, the Council over which I have the honour to preside beg to express, through the medium of this letter, our most appreciative gratitude towards the Royal Society of which you are the most capable and active Secretary, for the important assistance you have rendered us in selecting the experts to judge for us and whose decisions have always given the utmost satisfaction.

We also bear in mind that it is now 22 years since the first British Judges visited our traditional Palermo Show, and by their awards they have shown us how to improve our live stock, which are the descendants of the famous breeds of the United Kingdom.

These good Judges have not limited their efforts to placing the awards; but they have pointed out the defects in our stock, and both in earlier times and later on their advice has been of the utmost assistance to us. They have told us how to do things and have shown us the road to success.

As proof of our remembrance of all this kindness the Argentine Rural Society desire to honour the Royal Agricultural Society of England, and as a token of the friendship which has existed for so many years, they beg your Society to accept the small plaque which will be handed to you by Mr. William S McLaren.

With my best wishes to you and all the members of the Council of your Society,

I am,
Yours sincerely,
PEDRO T. PAGÉS, *President.*
C. J. VIERA, *Secretary.*

This year's panel of Judges also officiated at the Monte Video show of the Rural Association of Uruguay; and a letter expressing their appreciation and thanks has been received from the President of that body.

Chemical Department.

41. There has been some falling off in the number of samples submitted by members for analysis—the total for the year being 326 as against 355 in 1924. There were, however, perhaps more cases than usual that proved of importance to the purchasing members, thereby emphasising the utility of resort to chemical examination. As in the previous year, considerable attention has been drawn to the use of lime in different forms on land, a subject of much urgency in many parts of the country. Instances of loss of cattle through the occurrence of castor-oil bean in feeding stuffs, and of adulteration of Wheat and Oat Offals by rice-husk and other impurities, have also been dealt with.

42. An important event has been the issue of the Report of the Advisory Committee of the Ministry of Agriculture on the Fertilisers and Feeding Stuffs Act. This Committee—on which the Society was represented by Mr. Luddington, the chairman of

the Chemical Committee—carried on the work of Lord Clinton's previous Departmental Committee, and issued a Report which, it may be said, has met generally with satisfaction. It is to be hoped that there will now be no needless delay, but that the Ministry will shortly put forward a Bill embracing the conclusions come to practically unanimously by the two Committees appointed to enquire into the working of the present Act and its improvement.

43. An attempt was also made to come to some general agreement among scientists and practical men in regard to the Tables now in use for the Valuation of the Unexhausted Manurial Value of feeding stuffs and fertilisers. In the absence of any satisfactory agreement on the points involved, Dr. Voelcker has, at the request of the Central Association of Agricultural Valuers, revised and extended the existing Tables, bringing these up to date.

44. The institution, at the Rothamsted Experimental Station, of a series of Conferences on matters of scientific and practical interest, will be welcomed. Two such have already been held, the one on "Green-manuring," the other on "Liming of land." Both subjects were introduced by Dr. Voelcker, who drew largely upon the work done at the Woburn Experimental Farm in past years when it belonged to the Society.

45. The Chemical Committee has to deplore the loss by death of two of its members, Mr. C. Howard Taylor, and its senior member, former chairman, and ex-president of the Society, Sir J. B. Bowen-Jones, Bart. Sir Bowen for a very lengthened period devoted invaluable support to the work of the Committee, in which he took the greatest interest.

Botanical Department.

46. The year 1924–5 has been an uneventful one from the laboratory point of view, most of the enquiries being of a more or less routine nature, neither was any one of the sections into which they fall especially prominent. In many districts the adverse conditions beginning in the autumn and continuing until late in the spring handicapped wheat and winter oats considerably, and were probably partly responsible for epidemics of some of the fungoid diseases sent in for identification. One of these, "Take All," became a source of serious loss to wheat growers in the Eastern counties. Another, "Helminthosporium," was unusually prevalent on oats during the early summer, but the infected crops, as a rule, made an unexpectedly good recovery. The number of enquiries on such subjects as the management of grassland, crops for ensilage making, the identification and eradication of weeds, the characteristics of the newer cereals, will probably prove to be about the average of the past three years, but unless more germination tests are required on samples

of seeds for autumn sowing, there will be a diminution in the number of seeds samples tested.

Zoological Department.

47. The work of the Zoological Department has, as usual, consisted in advising Members of the Society in cases of insect attack; in investigating obscure points in the life-history of pests; and in the examination of specimens sent for identification. During the summer the applications were unusually numerous, and though most of the complaints concerned insects long recognised as injurious, this was by no means always the case. Attention has been given to new methods suggested for combating "Big Bud" in black currants, and to the menace to our cherry orchards from the unrestricted yearly importation of maggoty fruit from the Continent. So far the cherry fruit-flies have happily failed to obtain a footing in this country, but so disastrous an occurrence cannot be too carefully guarded against.

Animal Diseases.

48. During the first nine months of the year 123 outbreaks of foot-and-mouth disease were confirmed. Twenty-six of these occurred before September 26, and the intervals between successive outbreaks indicated that many of them were independent, that is, caused by a fresh introduction of the disease from abroad. The remaining 97 outbreaks occurred between September 26 and November 1, and 65 of them were in the last week of October. These outbreaks were distributed in three main centres, the first of which included parts of Lancashire, Cheshire, and York W. Riding; the second, parts of the counties of Leicester, Warwick, Rutland, and Northampton; and the third, Wiltshire. Anthrax, Sheep Scab, and Swine Fever have been rather more frequent than during the previous year, but there has been a decline in the number of outbreaks of Parasitic Mange, and only two cases of Glanders have been reported since the beginning of the year.

Foot-and-Mouth Disease.

49. In April last the Council, having considered the Report of the Departmental Committee on Foot and Mouth Disease, decided to address a letter to the Minister of Agriculture expressing regret at the reversal of the opinion of the 1922 Committee, by the Committee which reported early this year, as to the desirability of there being only one Diseases of Animals Committee in each geographical county. The Council recognised that there were difficulties, but did not agree that they could not be overcome. They therefore re-affirmed their resolution of February 6, 1924:—

"That the Council of the Royal Agricultural Society is strongly of opinion that legislation is urgently needed providing that there shall be one Authority only for the control of

Animal Diseases in each geographical county, which should be a Joint Animal Diseases Committee representing the County and Borough Councils within the boundaries of such County."

50. By resolution passed at their last meeting the Council urged upon the Ministry of Agriculture " the necessity of taking effective steps to prevent importation into this country of goods packed in hay, straw and other materials of a similar kind which may be a source of infection, and that they prohibit the sale of foreign fruit, forest, rose and other trees in local markets."

51. The Foot-and-Mouth Disease (Packing Materials) Order of 1925 since issued, which operates from November 19, goes some way to deal with the sources of infection to which reference is made in the resolution.

Sheep Scab.

52. The Council, at their April meeting, called the attention of the Ministry of Agriculture to the failure of the Sheep Scab Order of 1923 as it was being administered, and urged the Ministry to give the matter their most serious and prompt attention. A communication before the Council in May stated that the Ministry were elaborating a new Sheep Scab policy which could not be issued in definite form for some time, and which probably could not be applied until next year.

53. A Draft Order, with explanatory Memorandum, has now been circulated, and representative bodies are invited to express their views concerning it before it is put into force. It proposes to put into operation a plan for the eradication of Scab involving dipping requirements and movement restrictions limited to a comparatively short period of the year (July 15 to August 31), the remainder of the year being free from restriction or from the requirement of dipping on movement. These requirements and restrictions would apply to all sheep throughout Great Britain except in any county declared by the Ministry to be exempt on the ground that it has been free from Scab for at least the two preceding years. Special measures would, in addition, as at present, be applied by the Ministry to the worst infected areas, and the Order of 1920 with certain amendments will continue to apply to the sheep concerned in individual outbreaks of Scab.

54. On the recommendation of their Veterinary Committee, the Council decided on November 4 to signify their approval of the proposed new Order.

Tuberculosis Order, 1925.

55. On September 1 last the Milk and Dairies (Consolidation) Act took effect, and a new Tuberculosis Order came into operation. This order aims at the destruction of every cow suffering from tuberculosis of the udder, or giving tuberculous milk, and every bovine animal suffering from tuberculous emaciation, or

suffering from chronic cough, and showing definite clinical signs of tuberculosis. These forms of the disease are notifiable under the Order.

Importation of Pedigree Animals Act.

56. Under the Importation of Pedigree Animals Act, 1925, the Minister of Agriculture may make orders for allowing cattle, sheep, goats and swine brought from any part of His Majesty's Dominions to be landed in Great Britain without being subject to the provisions of Part I of the Third Schedule to the Diseases of Animals Act, 1894 (which relate to slaughter at the port of landing), but subject to the provisions of Part II of that schedule (which relate to quarantine). Such animals must be shown to the satisfaction of the Minister of Agriculture to be registered as Pedigree Stock in a Dominion herd or flock book recognised by him after consultation with the Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland.

Export of Horses Committee.

57. As the representative of the Society, Sir Gilbert Greenall attended and gave evidence before the Departmental Committee on the Export of Horses to the Continent.

58. In their Report recently issued the Departmental Committee state: "We are satisfied from the evidence which we have received that no horse which could be described as decrepit has been passed for export by the Port Inspectors since the reorganisation of the Ministry's arrangements in 1921, and that the provisions of the Acts of 1910 and 1914 are being effectively carried out."

Research Committee.

59. A report on the work completed and in progress under the auspices of the Research Committee appeared in the JOURNAL (Vol. 85, p. 393). There were also published in the same issue a report on the Spring Oat Trials conducted for the Committee by the National Institute of Agricultural Botany, and a paper by Mr. Dampier Whetham on "Electric Power in Agriculture," a question studied by him at the request of the Committee.

60. Investigations still in progress include experiments dealing with Whey, Malting Barleys, Lucerne Inoculation, Green Manuring, and the Improvement of Grass Land. New work undertaken includes experiments in seeding down to grass land at Compton Cassey, Gloucestershire, placed at the Committee's disposal by Prof. Somerville, and an investigation regarding the production of Sugar-Beet Seed by the National Institute of Agricultural Botany.

61. Reports on the Feeding of Silage Experiments in East Suffolk, and the Bullock Feeding Experiments in Norfolk (to be

continued this winter) will, it is hoped, be published in the next issue of the *Journal.*

62. The Committee have decided on the formation of a committee of agricultural scientists to undertake the task of collating for publication in a periodical bulletin the results of agricultural research.

Research Medal.

63. One of the essays awarded the Gold Medal in 1924, entitled "The Economics of Production on Grass and Arable Farms," by Mr. H. J. Vaughan, appeared in Vol. 85 of the JOURNAL. The other essay which gained the Medal in 1924, on "The Proteins of Green Fodder," by Mr. W. L. Davies, is being published in the *Journal of Agricultural Science.* The Medal for 1925 has not been awarded, as no essay of sufficient merit was received.

Congratulations.

64. On January 25 last the Earl and Countess of Coventry commemorated their Diamond Wedding, and the Council took the earliest opportunity of sending to the Earl and Countess, through the President, a message of hearty congratulation on this most happy event in the life of one of the Society's Trustees.

65. The President, on behalf of the Council, had occasion in February last to congratulate Sir Rowland Biffen, the Society's Consulting Botanist, on the honour of knighthood conferred upon him by His Majesty the King.

Gifts Received.

66. The Council are indebted to Mrs. Holroyd, of Epsom, for a handsomely framed copy of the engraving by S. W. Reynolds after Ansdell's large painting entitled "The Country Meeting of the Royal Agricultural Society."

67. A valuable gift has been made to the Society's Library of twenty-three volumes of the works of Arthur Young by Major G. D. Amery, of Oxford.

"Queen Victoria Gifts."

68. For the year 1925 the Trustees of the Queen Victoria Gifts Fund have made a grant of £140 to the Royal Agricultural Benevolent Institution, to be allocated in grants of £10 each to male candidates, married couples, and female candidates.

Agricultural Policy.

69. Sir Gilbert Greenall (President), Mr. John Evens, and Mr. Alfred Mansell have been appointed by the Council to confer with the Minister of Agriculture on Agricultural Policy.

Medal for Cattle Pathology.

70. In the competitive Examination for the Society's Prizes for Cattle Pathology, conducted by the Professors of the Royal Veterinary College, the Silver Medal was this year gained by

Mr. J. R. Hudson, of St. Michael's Place, Retford, Notts. The Bronze Medal on this occasion was not awarded.

National Diploma in Agriculture.

71. At the Twenty-sixth Annual Examination held this year, fifty-one candidates were successful in gaining the National Diploma in Agriculture. See lists on pp. 247–9.

National Diploma in Dairying.

72. The Thirtieth Annual Examination was held at the University College and British Dairy Institute, Reading, for English students, from September 4 to 12, and at the Dairy School, Kilmarnock, for Scottish students, from September 18 to 26. Sixty-three candidates were examined at the English Centre, of whom 40 satisfied the Examiners, one reaching the Honours standard. Forty-nine candidates presented themselves at the Scottish Centre, of whom 35 passed, including one with Honours. The lists of successful candidates will be found on pp. 252 and 253.

By Order of the Council,
T. B. TURNER,
Secretary.

16 Bedford Square, London, W.C.
November, 1925.

REPORT OF THE RESEARCH COMMITTEE.

CONTINUING the Report presented last year (*Journal*, Vol. 85, 1924), the Research Committee now begs to submit the following summary of work completed, continued and initiated during the year 1925:—

I. WORK COMPLETED OR IN PROGRESS.

EXPERIMENTS ON WHEY.

Reference was made in last year's report to the fact that Mr. L. Harding, who carried out for the Society in 1922 a laboratory and semi-technical investigation on the utilisation of whey, was continuing his work on a larger scale for the Ministry of Agriculture at their Research Factory at Haslington, near Crewe. The investigation is now completed, and an account entitled "The Whey Problem and a Solution," by Mr. Harding, has been published by the Ministry as Research Monograph No. 5, price 2*s*. 6*d*.

Mr. Harding submits that the work described in this report has demonstrated that—

(1) Whey can be condensed to less than one-tenth of its bulk in an economic manner without interfering with subsequent extraction processes.

(2) Condensed whey will keep indefinitely and can be easily transported in suitable packages.

(3) Given a sufficient quantity of raw material at a central factory, milk sugar, and animal foods can be economically produced from condensed whey.

Finally, that his suggested scheme for the utilisation of whey, which was the outcome of the work carried out for the Society, has been demonstrated to be technically and economically practicable.

The work on the more economical drying of whey on roller driers fitted with a specially invented pre-heater and concentrator has proceeded satisfactorily under the Direction of Capt. Golding at the National Institute for Research in Dairying, and extended trials have been made to test the efficiency of the new apparatus mentioned in the last report.

SILAGE FEEDING EXPERIMENTS.

These experiments were conducted under the auspices of the East Suffolk Education Committee by Mr. A. W. Oldershaw. The objects and method of the feeding trials were described at length in the Committee's last report, and the results have been summarised by Mr. Oldershaw in an article appearing in this issue of the Society's *Journal* (pp. 112–128).

GREEN MANURING.

Experiments on green manuring were begun in 1924, and the trials have continued during the year just ended.

Two distinct aspects of the problem are embraced in these trials :

(1) Methods of obtaining green crops.

(2) The effectiveness of green crops as green manure.

One main section of the experiments, that dealing with autumn-sown catch crops in the South-west, and with late summer catch crops in the East and Midlands, is concerned wholly with the second of the above aspects.

The other main section of the experiments is concerned with the first of the above aspects, namely how to obtain satisfactory yields of green crops for green manuring purposes.

It must be emphasised that seasonal conditions affect the success of green manuring systems more than that of other methods of manuring. If anything has to be sacrificed, in a bad season, it will be a crop which is not *itself* going to bring in any actual return, such as a green manure crop, rather than a crop which will itself be marketable. Moreover, in the case of green manuring the actual *production* of the manure depends on suitable growing weather, so that the yield of the succeeding main crop may be doubly influenced by adverse climatic conditions.

The practicability of a system of green manuring over an average run of seasons can thus be judged only on the basis of experiments carried on for a number of years.

LUCERNE EXPERIMENTS.

(*a*) *Seed Inoculation.*

Of the trials started in 1924, ten showed a better growth from the inoculated than from the untreated seed, but unfortunately the wet summer caused the loss of the majority of these trials. During that year laboratory work was carried out which resulted in a modification of the inoculation technique. This modified technique was tested at another 30 localities in 1925, four of which have since been lost from various causes. There are now 31 trials in progress, ten of these lying within the South Eastern counties, where lucerne is already grown with success, and 21 distributed over the remainder of Great Britain, where lucerne is seldom grown. In the South-Eastern area, three trials have so far shown a benefit from the treatment, while outside this area there are 17 localities where inoculation has improved the growth. The experiments which have not yet shown an increase may of course do so this year, as they were in most cases sown late owing to the drought, but the results already seem to justify the opinion that lucerne seed should always be inoculated except in districts where it is known to grow successfully without inoculation. Up to the present, weight results have been obtained from seven of the trials, the following list showing the percentage increases due to inoculation obtained in the counties named.

	Per cent.	Per cent.	Per cent.
Kincardineshire	10	40	17
Durham	16·8	—	—
Staffordshire	2	—	—
Warwickshire	35	—	—
Gloucestershire	179	—	—
Wiltshire	141	—	—
Cornwall	31	—	—

In Staffordshire, while the increase in yield was not significant, there was an increase in nitrogen content of 48 per cent.

The experiments are being continued, and pending their completion members can obtain information on the process of inoculation and other points by communicating with Mr. Thornton, at the Rothamsted Experimental Station.

(*b*) *Cultivation Experiments.*

A preliminary report on the work Mr. Mackintosh is conducting, at Reading, dealing with the initial treatment of the plots and the growth of the lucerne after sowing was presented by the Committee last year. The present report deals with the cultural operations and the results obtained to date.

An inspection of the plots was made on March 17, 1925, and on the drilled plots the rows were easily apparent everywhere, and the plants, though varying in size, were well established in spite of a wet winter. On the drilled plots, which had also been hand hoed, there was a much better growth and the plants themselves were distinctly stronger. On the broadcasted plots there was, on the whole, a smaller proportion of lucerne plants and this was particularly noticeable on the plots which had not received any surface cultivation.

From the presence of many smaller plants it appeared that germination of a proportion of the lucerne seed had been delayed until early autumn in 1924, following on the first hoeing and harrowing.

Surface Cultivation, Spring 1925.—On April 3, four of the drilled and eight of the broadcasted plots were harrowed three times each. No treatment was given to the four drilled and four broadcasted plots which had received no treatment in 1924. The hoeing by hand of the remaining four drilled plots was carried out early in May. The accompanying plan explains more fully the treatment of the different plots.

The plots were again inspected on June 16 during a period of drought which had extended from May 31. When the area was studied from the top of the field, the lines of the drills on the drilled plots could be readily distinguished, and on going through the crop the drilled plots were seen to be much better than the broadcasted plots, with one exception. There was also a considerable growth of weeds over all the plots, particularly slender foxtail, and in one part of the field there was also some coltsfoot.

Careful estimates were made of the amount of lucerne in each plot before cutting for hay, and the figures will be submitted when the complete record for the year's work is sent in. All the plots were cut for hay on June 17, and the weighing of all the produce from each plot was carried out on June 20. After this date there was a very appreciable increase in the growth and amount of lucerne on all the plots, whereas the weeds were much less in evidence. The strongest growth of lucerne was still most noticeable on the hand hoed plots, followed by the drilled and harrowed plots. On the broadcasted and harrowed plots the amount of lucerne was evidently increasing, though still much too sparse to be considered a good plant, and over all was more abundant than at any previous time.

PLAN OF LUCERNE EXPERIMENTAL AREA 1925.

No Treatment	Three times Harrowed	Hoed	*No Treatment*	Three times	Harrowed
1	*2*	*3*	*4*	*5*	*6*
Drilled			Broadcast		

No Treatment	Three times	Harrowed	*No Treatment*	Three times Harrowed	Hoed
7	*8*	*9*	*10*	*11*	*12*
Broadcast			Drilled		

No Treatment	Three times Harrowed	Hoed	Three times	Harrowed	*No Treatment*
13	*14*	*15*	*16*	*17*	*18*
Drilled			Broadcast		

Three times	Harrowed	*No Treatment*	*No Treatment*	Three times Harrowed	Hoed
19	*20*	*21*	*22*	*23*	*24*
Broadcast			Drilled		

After mowing in June, 1925, the plots were hoed and harrowed according to the plan of the experiment and the lucerne plant improved considerably. The produce on the plots was mown on August 19, but for some time afterwards the weather was very wet and it was impossible to make hay. Consequently the weights of produce from each plot were not obtained. In the end the partially rotted material was raked off and carted away. Later in the season some of the plots showed a moderate growth, which was cut for green soiling in October.

The general description of the results during 1925 is that a disappointing yield on all plots was obtained, and, with the exception of the first cut in June, the weather made the weighing and harvesting of later cuts impossible. The hand-hoed plots have been kept clean, but on the harrowed plots and still more on the control plots which had received no treatment, there is a very considerable growth of weeds.

The treatment according to plan will be continued throughout 1926, and there is a prospect that there will be a sufficient growth of lucerne to give a better measure of the effect of the different treatments.

MALTING BARLEY TRIALS.

With the exception of the Manuring of Malting Barley Trials and the Variety Trials, upon which three years' data have been obtained, the whole of the results to date require confirmation. It is therefore proposed that a further year's work, at least, is required on those problems which formed the subject of the Committee's programme on the Norfolk Agricultural Station last year, under the direction of Mr. Rayns. It will be remembered that these included:—

1. A Variety Trial of Spring Barleys.
2. A Manuring of Malting Barley Trial.
3. A "Census" of an acre of Barley.
4. Investigation into the depth and rate of Seeding.
5. The influence of balanced and unbalanced nitrogenous manuring on Barley.—A preliminary to a detailed investigation of barley-growing following Sheep.

Nitrogenous manuring, in the form of 1 cwt. of Sulphate of Ammonia, has increased the yield per acre by 15 per cent. and has not impaired the quality in any way. This increase will bring a 30 bushel crop to one of 34½ bushels, at an additional cost of no more than 15*s.* per acre. Such manuring, however, has only been proved for a barley crop following roots that have been carted off, and may not therefore apply to the many acres of barley that follow swedes fed on the land. This is an important problem, and preliminary work has been commenced in studying the effect of balanced and unbalanced nitrogenous conditions in the soil on malting barley. This is closely related to the sheeping problem, for manuring by sheep is mainly nitrogenous. At the onset it was essential to study the behaviour of barley under controlled soil conditions, as a preliminary to work on land actually manured by sheep. The preliminaries are now over, and the field is clear for the elucidation of a problem that has never been attacked and upon which knowledge is very scanty.

As a matter of general interest the barley programme of the Norfolk Agricultural Station includes the additional problems :—

1. An investigation into the relative winter hardiness of the varieties Archer-Spratt, Plumage Archer and Archer when Autumn sown.
2. A comparison of the yield and quality of these varieties when Autumn and Spring sown.

So far as Norfolk is concerned the possibilities of Autumn-sown two-rowed barleys must be investigated in detail.

The yield data which have resulted during the past year are attached. The quality determinations which are being made by the Institute of Brewing have not yet been received.

Yield Data to December 31, 1925.

VARIETY TRIALS.

Varieties	Average of two years	
	Grain cwts. per acre	Straw cwts. per acre
Beaven's Improved Archer	16·6	20·0
„ 1924 Plumage Archer . . .	16·8	17·7
Sunrise	18·9	21·3

MANURING OF MALTING BARLEY.

Treatment per acre	Average of three years per acre	
	Grain cwts.	Straw cwts.
No Manure	14·65	15·96
3 cwt. Super 1 „ Sulphate of Potash 1 „ Sulphate of Ammonia	19·15	22·30
3 „ Super 1 „ Sulphate of Potash	17·01	18·79
1 „ Sulphate of Potash 1 „ Sulphate of Ammonia . . .	16·88	20·07
3 „ Super 1 „ Sulphate of Ammonia . . .	18·29	20·85

Quite early in the above trial it was obvious that the inclusion of Sulphate of Ammonia was a potent factor in increasing the yield. To explore its limit of possibilities a further series was put down with two varieties and gave the following results:—

INCREASING QUANTITIES OF SULPHATE OF AMMONIA, 1925.

Treatment Cwts. per acre	Plumage Archer Yield cwts. per acre		New Cross Yield cwts. per acre	
	Grain	Straw	Grain	Straw
0	17·17	16·83	17·85	17·64
1½	22·95	22·61	24·99	24·31
3	21·59	23·46	24·99	25·35

All the plots stood well, which was quite contrary to expectation. In anticipation of practical difficulties of this nature and possible ill effects on the quality, an auxiliary trial was undertaken with increasing quantities of the following mixture:—

3 Super. 3 Kainit. 1½ Sulphate of Ammonia.

The results so far are:—

INCREASED QUANTITIES OF A BALANCED MANURING, 1925.

Treatment Cwts. per acre	Plumage Archer Yield cwts. per acre		New Cross Yield cwts. per acre	
	Grain	Straw	Grain	Straw
0	18·02	17·34	23·29	20·03
3	21·25	20·06	24·48	23·97
6	22·27	21·76	30·70	29·64
9	26·03	30·02	31·21	29·68

Malting tests on these barleys in the "Increasing Quantity" series will give valuable information, which while being directly related to them is also of application as a guide to further work on manuring for barley after sheep. So far 1 cwt. of Sulphate of Ammonia has not decreased the quality. This is again contrary to the accepted idea.

Depth and rate of sowing both influence quality. There are distinct differences in the various samples.

DEPTH OF SEEDING, 1925.

Depth of Sowing	Yield per acre	
	Grain Cwts.	Straw Cwts.
Plot 1. Surface	21·8	23·5
„ 2. ¾ in.	21·1	25·2
„ 3. 1¼ „	20·3	24·05
„ 4. 2 „	20·9	20·7

RATE OF SEEDING, 1925.

Rate per acre	Yield per acre	
	Grain Cwts.	Straw Cwts.
Plot 1. 1½ bushels	23·1	26·6
„ 2. 2½ „	22·2	23·7
„ 3. 4 „	21·5	23·3

GRASSLAND IMPROVEMENT.

(*a*) *Shoby, Leicestershire, Experiments.*

Grazing Season 1925.—At the conclusion of the 1924 grazing season it was found that the land had been very evenly grazed, and that practically no surplus grass remained, consequently during the Winter of 1924–25 the land was rested, it being considered that no winter grazing was necessary.

During the Winter the land was twice harrowed with heavy Parmeter Harrows, and in addition a portion of about three acres in each plot was also treated with a new machine called the "Rejuvenator." This machine cuts the turf into strips about eight inches wide, by means of sharp coulters which penetrate to a depth of about two and a half inches. When the turf is matted by old "fog," the machine does useful work in promoting aeration of the soil and it was distinctly noticeable that the Wild White Clover readily runs along the newly formed incisions, thus facilitating the spread of that valuable plant, which incidentally promotes more even grazing. When the land is set up in pronounced ridges—as it is at Shoby—the machine also does good in letting in the water, particularly on the crown of the ridges; this again promotes growth on the ridges and ultimately more grazing. These high-backed lands are the first to show the effects of dry weather, particularly on the crown of the ridge, and this is, no doubt, due to the fact that the ridge acts more in the nature of a thatch in shooting the rains into the furrows. It is very probable that the Rejuvenator would do a vast amount of good if used on the ridges of many grass fields where there is no mat all, simply by promoting the entrance of water into the soil and particularly so at the crown of the ridge.

The cattle and sheep were again purchased by Messrs. James, Astill and S. W. Fox, in April and May. The 35 cattle were ordinary home-bred shorthorn steers, ranging from two to two-and-a-half years old; the sheep were a fairly even lot of half-bred hogs. The 51 sheep purchased were weighed and finally arranged in five lots of ten each and placed upon the plots on April 7. One sheep had to be sold owing to being injured by a motor car. The cattle were weighed and arranged in even lots and placed on the plots on May 12.

When the grazing period commenced on April 7, with sheep alone, there was a fair bite of grass which later on, and particularly throughout the month of May, grew very rapidly, and about the first ten days in June it was quite obvious that the growth of grass was proving to be more than ample, and it appeared, for a time, that it might be necessary to increase the number of cattle in order to cope with the great amount of grass. After consulting with Dr. Somerville, however, it was decided to leave the stocking of the plots as originally settled. The wisdom of this decision appeared later, when very dry conditions supervened during the month of June.

The progress of both cattle and sheep proved quite satisfactory considering the climatic conditions which prevailed, especially in June and early July.

Towards the end of the grazing season it was decided to reduce the number of sheep on each plot, and accordingly five sheep from each plot (a total of 25) were sold by auction at Melton Mowbray Market on September 8. The remainder of the sheep (25) and the 35 bullocks were sold on October 6 at the same market. The plots have been very evenly grazed throughout this season.

During the Summer, the plots were visited by parties of Leicestershire farmers and the visitors, about 250 in the aggregate, showed a great interest in the trials.

The Plots upon which slag has been applied, all show a marked increase in the development of Wild White Clover.

Plot No. 5, which received North African Phosphate, shows a very fair development of Wild White Clover, but it is by no means so pronounced as the Plots receiving Slag. The action of this fertiliser appears to be somewhat slower than Slag.

The following Summary brings out the more salient features of the results obtained in the Grazing Season of 1925, and for convenience of comparison the results obtained in 1924 are incorporated.

SUMMARY OF LIVE WEIGHT INCREASES PER ACRE, 1924 AND 1925.

	Plot I		Plot II		Plot III		Plot IV		Plot V	
	Slag		Slag and Cake		No Manure		Slag		North African Phosphate	
	Cattle lb.	Sheep lb.	Cattle lb.	Sheep lb.	Cattle lb.	Sheep lb.	Cattle lb.	Sheep lb.	Cattle lb.	Sheep lb.
1924	226	43½	236	42½	186	40	201	47	193	38
1925	199	71½	220	62	167	66	208	79	168	70½
	425	115	456	104½	353	106	409	126	361	108½

VALUE OF INCREASES PER ACRE.
(Cattle, 4*d*., and Sheep, 4½*d*. per lb.)

	Plot I		Plot II		Plot III		Plot IV		Plot V	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1924. Value of Live Weight Increase	91	7	94	7	77	0	84	7½	78	7
1925. Value of Live Weight Increase	93	2	96	7	80	5	98	11½	82	5
	184	9	191	2	157	5	183	7	161	0
Less cost of Manures and Cake, 1924–25 .	16	3	71	4	—		32	6	23	2
	168	5	119	10	157	5	151	1	137	10

SUMMARY OF PURCHASES AND SALES OF STOCK.

Purchases.	£	*s.*	*d.*	*Sales.*	£	*s.*	*d.*
35 Bullocks. . . .	674	18	2	35 Bullocks. . . .	712	17	6
51 Sheep	223	5	0	51 Sheep	203	17	0
				Wool	26	1	6
	£898	3	2		£942	16	0

(*b*) *Sawley, near Clitheroe, Experiments.*

These experiments are being continued, and a report will be presented in due course.

Bullock Feeding.

The experiments at the Norfolk Agricultural Station undertaken to investigate the economy of reducing the ration of oilcake and meal in the Winter feeding of cattle have been continued. Owing to the closing of markets necessitated by foot and mouth disease the sale of the experimental bullocks has been delayed. A full report, however, will be presented next year.

II. WORK BEGUN IN 1925.

Sugar-Beet Seed Investigation.

The National Institute of Agricultural Botany is engaged upon investigation relating to Sugar-Beet on behalf of the Society. The work has not proceeded far enough to justify a report, but information upon the arrangements made may be of interest to the Council :—

1. Stocks of Sugar-Beet seed have been obtained from the following sources :—

Messrs. Gartons,	No. 624
	No. 1024
	No. 1124
	No. 1224
J. Zapotil	Prague
Wohanka	,,
(No special mark)	,,
ilmorin's Selection B	
Vilmorin's White French	
British Sugar-Beet Society's	"Dippe"
,, ,, ,, ,,	"Kuhn"

These have been planted at the Norfolk Agricultural Station's farm at Sprowston, nr. Norwich, each in four separated drill widths scattered over the trial area. Such repetition should give data of some reliability concerning the comparative yields of the varieties in question.

In addition, single plots of 7 stocks of seed supplied by the Anglo-Scotch Beet Sugar Corporation are being grown in the same field for observation purposes. Reserve stocks of seed of all the above have been retained for further sowing if required in 1926.

It is proposed that if any of the first-mentioned stocks are shown by trial to be distinctly inferior they shall be replaced in the trial by more promising types from those supplied by the Anglo-Scotch Beet Sugar Corporation.

Arrangements have been made for sugar analysis of all those stocks by a qualified chemist at the School of Agriculture, Cambridge. This chemist has already made a sectional analysis of a batch of beets in order to discover the method of coring which will supply the most accurate estimate of the sugar content of the roots, and a standard method of coring has been decided on as a result of this work.

In each case cores of duplicate lots of 50 roots of each strain will be taken by the standard method and sent to Cambridge for analysis.

2. A tour of inspection has been made in the Eastern Counties to view crops of sugar-beet being grown on behalf of Messrs. Gartons. Permission is being obtained to sample 9 varieties growing on one farm (4 identical with those in the Norfolk Agricultural Station trial). In addition Messrs. Gartons will supply samples from 14 stocks; testing will also take place of several samples from manurial trials at the Norfolk Agricultural Station. Since these crops will also be tested at sugar factories, information should be forthcoming as to the agreement between the results of scientific and commercial methods of sampling and analysis. Finally, Dr. Beaven, of Warminster, who is carrying out independent yield and quality trials has promised to give access to his results.

It is possible that further samples from commercial crops for quality test will be received by the Institute in the course of the Autumn, and these also will be analysed at the School of Agriculture.

CROP DRYING DEMONSTRATION.

With the assistance of a grant from the Committee, a demonstration of crop drying in the stack was given in the Society's Showyard, at Chester, by the Institute of Agricultural Engineering, Oxford. The demonstration was witnessed by His Majesty.

III. MISCELLANEOUS MATTERS.

THE COLLECTION AND PUBLICATION OF THE RESULTS OF AGRICULTURAL RESEARCH.

During the year the Committee has given much consideration to the important question of the dissemination of the results of agricultural research. There is a pronounced "lag" in the translation into practice of valuable information acquired by experiment and research, due to the difficulty of making such information known to agriculturists. The channels of communication, at the present time, are provided by the reports of the research stations, articles by research workers in the agricultural press and in the annual publications of the "Royal" and kindred societies, by public lectures, and by demonstrations organised, in the main, by the County Agricultural Advisory

Staffs. The Ministry of Agriculture issues, from time to time, a valuable summary of work in progress at the various institutions receiving grants-in-aid from public funds, under the title of "Agricultural Research and the Farmer." But useful as these methods of dissemination are, the Committee felt that more rapid progress could be made if it were possible to bring together, in a single volume published annually, the ascertained results of the research work of the year. These results should be presented in a concise form, and in language easily understood by the non-scientific but practical man, and should include the results of agricultural research at home or abroad of present importance, or likely to be of future value, or even definitely of negative value. The volume should also be of service to those engaged in educational work at Universities and Colleges, and to County Agricultural Organisers. Further, in order that the publication might act as a reference book to scientists in future years, it should include analysed references and indices, showing from what journals, bulletins, etc., the information had been drawn.

After full consideration the Committee decided to invite a number of gentlemen engaged in agricultural research to meet Sir Merrik Burrell for the purpose of discussing the formation of a Committee to give effect to these proposals. The Committee proposed were :—

Sir John Russell (Soils and Manures).
Sir John McFadyean (Veterinary Science).
Dr. C. Crowther (Animal Husbandry).
Mr. C. S. Orwin (Agricultural Economics).
Dr. B. J. Owen (Agricultural Engineering).
Mr. J. Mackintosh (Dairying).
Mr. F. L. Engledow (Plants and Crops—including their diseases and parasites),

with Mr. Wilkins, of the Ministry of Agriculture, as liaison member between the Committee and that Department.

All present agreed that no work of the kind proposed was being done in any one of the sections of Agricultural Science mentioned above, and that great value should accrue by preventing the loss of valuable results through lack of proper recording, and by the promulgation of the latest scientific knowledge in language easily understood by all, and that this value would not be confined to Great Britain but would be of service in the Dominions and other parts of the world.

It was the general opinion that there was no other body in Great Britain able to undertake the work except the Royal Agricultural Society of England.

The size of the proposed Volume was discussed and it was decided that about 300 pages should suffice (with illustrations as necessary), the space to be divided amongst the various contributors according to the importance of their records in any particular year. The publication of the Volume could probably take place each year in the Autumn.

All the gentlemen named have agreed to assist, and Mr. Orwin will act as Chairman of the Committee and General Editor.

GOLD MEDALS FOR RESEARCH.

The experience acquired since the competition for a gold medal for agricultural research was revived, suggests that the present scheme, whereby candidates submit essays describing their work, is not producing the best possible results. The Research Committee are of opinion that some change is necessary in the conditions governing the award of gold medals, and they suggest the appointment of a Sub-Committee to consider the matter, consisting of Mr. Whetham and Mr. Orwin, representing the Research Committee, and Lord Harlech and Col. Stanyforth, nominated by the Selection Committee.

SUMMARY.

The Research Committee have been actuated throughout their work by the desire to allocate the Society's grant for the purpose of assisting trained scientific agriculturists to carry out investigations of problems arising in farming practice on properly organised lines. They wish to record that in several cases their expenditure has been in the form of grants-in-aid, and that liberal contributions to their work have been made from other sources, in the form of money, land, buildings and personal help.

NATIONAL AGRICULTURAL EXAMINATION BOARD

Appointed by the Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland.

I.—REPORT ON THE RESULTS OF THE TWENTY-SIXTH EXAMINATION FOR THE NATIONAL DIPLOMA IN AGRICULTURE.

HELD AT LEEDS, APRIL 15 TO 22, 1925.

1. The Twenty-sixth Examination for the NATIONAL DIPLOMA IN AGRICULTURE was, by the courtesy of the authorities, held at the University of Leeds, from the 15th to the 22nd April last.

2. The subjects of Examination were Practical Agriculture (two papers), Farm Machinery and Implements, Land Surveying

and Farm Buildings, Agricultural Chemistry, Agricultural Botany, Agricultural Book-keeping, Agricultural Zoology, and Veterinary Science and Hygiene. The whole nine papers could be taken at one time, or a group of any three, four or five in one year and the remaining group within the next two years. Candidates taking the whole Examination in one year who failed in not more than three subjects, and candidates taking a second group who failed in not more than two subjects, were allowed to appear again for those subjects only next year. Candidates failing in one or two subjects of a first group of not less than four, or in a single subject of a group of three, were permitted to take those subjects again in conjunction with the second group.

All candidates, before sitting for the Practical Agriculture and Farm Machinery and Implements papers, had to produce evidence of possessing a practical knowledge of Agriculture obtained by residence on a farm for a period or periods covering a complete year of farming operations.

3. One hundred and seventy-three candidates presented themselves, as compared with 155 last year. Nineteen candidates took the whole Examination, 76 who had previously passed in certain subjects appeared for the remaining portion, and the other 78 candidates came up for a first group of subjects.

4. At Leeds, 17 candidates failed in *Farm Machinery and Implements* alone, and, as a special matter, these were given an opportunity of being re-examined in the subject. A fresh paper, set by the same Examiner as at Leeds, was answered simultaneously by the candidates who took advantage of this opportunity—4 in Edinburgh and 10 in London—on August 5. As the result of this further examination, four candidates reached the pass standard in this subject, and their names are included in the lists which follow.

Fifty-one candidates have been successful in obtaining the Diploma, the first two *with Honours*. The names of the other Diploma-winners are in alphabetical order:—

Diploma with Honours.

1st. HARRY OATES HIRST, University of Leeds.
2nd. JOHN HAINSTOCK ANDERSON, University of Leeds.

Diploma.

STEPHEN BARRATT, University of Leeds.
ALEXANDER JOHN BEAN, University of Aberdeen.
JOSEPH BROADHURST, Midland Agricultural College, Sutton Bonington, Loughborough.
WILFRID JAMES BRYAN, Harper Adams Agricultural College, Newport, Shropshire.
NEEL CORDEROY, Seale Hayne Agricultural College, Newton Abbot, Devon.

James Alan Craig, West of Scotland Agricultural College, Glasgow.
John Robertson Currie, University of Glasgow and West of Scotland Agricultural College.
George Feuffel, West of Scotland Agricultural College.
Major Thomas Foster, D.S.O., Park View, Combermere, Whitchurch, Shropshire.
Gerald E. N. Furse, Seale Hayne Agricultural College.
John Gibb, West of Scotland Agricultural College.
James Joseph Glavin, Royal College of Science, Dublin.
Frances Janet Glegg, East of Scotland Agricultural College, Edinburgh.
Charles Roy Greenwood, Harper Adams Agricultural College.
Harold Slater Haigh, University of Leeds.
Bernard James Haimes, Seale Hayne Agricultural College.
Donald Horner, Seale Hayne Agricultural College.
John Everard Hosking, Seale Hayne Agricultural College.
John Boag Houston, West of Scotland Agricultural College.
Albert David Imper, University of Aberdeen.
Reginald Alfred Jeffery, Midland Agricultural College.
Dorothy Kenyon, University College of Wales, Aberystwyth.
Vida Helen Lamb, West of Scotland Agricultural College.
John Rial Lee, University of Leeds.
George Winslow Lock, Midland Agricultural College.
Leonard Thornton Lowe, School of Agriculture, Reaseheath, Nantwich.
Joseph McClemont, University of Glasgow and West of Scotland Agricultural College.
Hugh McCrae, University of Glasgow.
William Alexander McGeoch, West of Scotland Agricultural College.
Alexander McGibbon, University of Glasgow and West of Scotland Agricultural College.
Sam Morris Makings, Midland Agricultural College.
Agnes Adam Meikle West of Scotland Agricultural College.
Cyril Sharman Morris, Seale Hayne Agricultural College.
James Morrison, University of Aberdeen.
Robert Struthers Reid, West of Scotland Agricultural College.
David Robertson, University of Aberdeen.
William Bird Robson, Armstrong College, Newcastle-on-Tyne.
Donald Rowe, University College, Reading.
Thomas Ronald Shaxson, Seale Hayne Agricultural College.
Margaret May Speedy, East of Scotland Agricultural College.
Janet Lambie Stewart, West of Scotland Agricultural College.
Agnes B. Thornley, West of Scotland Agricultural College.
Sidney Stanley Joe Travers, S.E. Agricultural College, Wye, Kent.
Walter Weir, University of Glasgow and West of Scotland Agricultural College.
Charles Harrower Westwater, University of Glasgow.
Allen Heywood Wilson, Midland Agricultural College.
Herbert Wootton, University of Leeds.
Maurice Charles Wright, West of Scotland Agricultural College.
Archibald Dougall Wyllie, West of Scotland Agricultural College.

5. Ten of the Candidates appearing for the whole examination failed in not more than three subjects, and seven of those taking a second group of subjects failed in not more than two. These will be permitted next year to take again the papers in

which they failed; if then successful in passing, they will be awarded the National Diploma.

6. Of the 78 candidates appearing for a first group of subjects, the following 37 succeeded in passing, and will therefore be permitted, subject to the Regulations, to take the second group in 1926 or 1927:—

ALEC S. ASHMOLE, Seale Hayne Agricultural College, Newton Abbot.
LEONARD A. ATTFIELD, Harper Adams Agricultural College, Newport, Shropshire.
CYRIL BEAUTEMENT, University of Leeds.
JOHN ANDERSON BROWN, Midland Agricultural College, Sutton Bonington.
JAMES CLARK BROWNLIE, West of Scotland Agricultural College.
ALEXANDER CALDER, University of Aberdeen.
JOHN CALDER, West of Scotland Agricultural College.
KENNETH MATHESON CAMPBELL, University of Glasgow and West of Scotland Agricultural College.
JOHN MAURICE COTTERILL, University College, Reading.
ARTHUR CYRIL CROSS, Midland Agricultural College.
JOHN FULLERTON, Harper-Adams Agricultural College.
JOSEPH EDWARD GIBBY, University College, Aberystwyth.
STANTON GIBSON, University College, Reading.
DONALD HENRY HALDANE, University of Leeds.
HERBERT HODGSON, Midland Agricultural College.
DUDLEY ALFRED HOLE, University of Leeds.
WILLIAM ALFRED JOHNSON, Harper Adams Agricultural College.
JOHN DAVID STUART MARTIN, East of Scotland College of Agriculture.
ALEXANDER FLEMING MEIKLE, West of Scotland Agricultural College.
ALEXANDER GRAY MOWAT, University of Glasgow and West of Scotland Agricultural College.
FRANK ROWELL POLLARD, Midland Agricultural College.
EDWARD GUTHRIE PRENTICE, University of Glasgow and West of Scotland Agricultural College.
LAUNCELOT RENNIE, West of Scotland Agricultural College.
GEORGE MARWICK ROBERTSON, Midland Agricultural College.
HENRY JOHNSON SLANEY, Midland Agricultural College.
HENRY CHARLES SMITH, Midland Agricultural College.
GEORGE DUNCAN STEVENSON, Midland Agricultural College.
JOHN STIRLING, West of Scotland Agricultural College.
GEORGE TEMPLE, West of Scotland Agricultural College.
JOHN OWEN THOMAS, University College, Aberystwyth.
DENZIL TREVAINS, Seale Hayne Agricultural College.
ARTHUR EDWIN TROTMAN, Harper Adams Agricultural College.
GEORGE NICHOLAS KING TURNBULL, West of Scotland Agricultural College.
MAURICE WARD, University of Leeds.
JOHN MCADAM WATSON, West of Scotland Agricultural College.
ARTHUR PALMER WELLER, University College, Reading.
THOMAS STALEY WRIGHT, Seale Hayne Agricultural College.

7. Twenty-six of the unsuccessful candidates sitting for a first group failed in one or two subjects, which, in accordance with the Regulations, they will be allowed to take again in conjunction with the second group.

8. The Reports of the Examiners in the different subjects are appended :—

PRACTICAL AGRICULTURE. (First Paper, 400 Marks. Second Paper, 400 Marks.) William Bruce, M.A., B.Sc., G. H. Garrad, N.D.A., and William Burkitt, M.Sc.

Ignorance of the principles of breeding of Farm Live Stock was very marked ; in a country in which the live stock is so important, the lessons derived from the experience of last-century breeders should receive more attention in our Colleges of Agriculture than is apparently the case at the present time.

Attention must be drawn to the failure of many of the candidates to identify the common feeding stuffs in ordinary farm practice.

Whilst, owing to the youth of many of the candidates, it is perhaps hard to criticize them on account of their very local knowledge of agriculture, we feel bound to draw attention once more to the great advantage accruing to candidates who have a knowledge of more than one system of farming.

FARM MACHINERY AND IMPLEMENTS. (300 Marks.) Captain B. J. Owen, M.A., D.Sc., etc.

The general standard of knowledge was disappointing, and it appears that the teaching in Agricultural Engineering in this country does not receive the attention that it deserves.

The paper work was of a very poor quality, and the average marks obtained out of a possible of 300 was only 115. Only a very weak knowledge was shown of simple terminology and the description of ordinary everyday farm implements was too vague.

A fairly lengthy *vivâ voce* examination was given in purely practical questions such as the faults found in the reaper and binder and their adjustments ; also in the common adjustments made in the plough. But this examination again revealed an indifferent knowledge of the practical application of farm machinery. It was realised that agricultural students are not intended to be engineers, but if the teaching of Agricultural Engineering does not produce a fairly thorough practical knowledge of the efficient use of ordinary farm implements, such as could make the students capable of judging the best machine for a given type or condition of work with a knowledge of the simple economic factors involved, then the training must be regarded as having failed in its main purpose.

My opinion is that any substantial improvement in this subject cannot be looked for until all the agricultural institutions from which the candidates are drawn provide a thorough training in the practical use of farm machinery, in addition to the theory underlying such use. From a considerable experience of methods adopted in other countries, particularly the United States of America, I have seen the advantage accruing from a training of this character.

LAND SURVEYING AND FARM BUILDINGS. (100 Marks.) R. Cobb, F.S.I.

The written questions were on the whole better answered than last year, but possibly the paper was on the easy side and followed a little more than usual the stereotyped and text-book lines.

I found the elementary practical questions in the *vivâ voce* were not answered as might have been expected in a Diploma of this description.

The surveying and drainage parts of the subject were better known than that of the farm buildings.

AGRICULTURAL CHEMISTRY. (300 Marks.) Dr. J. Augustus Voelcker, M.A., F.I.C., and H. J. Page, B.Sc.

In this subject the results, while not being marked by special excellence (only one candidate reaching five-sixths marks), were, on the whole, satisfactory, inasmuch as 32 out of the 77 obtained two-thirds of the total marks available. The number of failures was 16, while 7 others only just reached qualifying marks. As has been observed before, the chief deficiency —one brought out markedly in the *vivâ voce* examination—was the want of grounding in general chemistry, particularly in relation to organic chemistry. On the other hand, questions dealing with the practical application of the subject were well answered, and specimens submitted were, as a rule, recognised. A want of familiarity with recent developments was too frequently shown, and questions such as No. 4 (purification of sewage) and No. 10 (insecticides and fungicides), which were of a more specialised nature, were less generally attempted.

AGRICULTURAL BOTANY. (200 Marks.) Prof. John Percival, M.A., Sc.D.

On the whole, the candidates did better in this subject than last year. Nearly all had a satisfactory knowledge of the commoner grasses and clovers, and their seeds, but few recognised ears of rye, bearded wheat or wild oat. Botanical descriptions were not good, and more attention should be given to this ; most of the descriptions of common weeds were very vague. The majority of the candidates had not had sufficient training in practical laboratory work ; this observation applies more particularly to the examination of parasitic fungi and their effects on the crops of the farm.

Agricultural Book-Keeping. (200 Marks.) James Wyllie, B.Sc., N.D.A.(Hons.), N.D.D.

Although a number of excellent papers were submitted, the average standard of merit leaves room for considerable improvement. Few candidates seemed to have considered the use to which farm accounts might be put as a guide to more efficient management; many gave the impression that to them book-keeping is a purely mechanical process, the fundamental principles of, and reasons for, farm-accounting being imperfectly understood. Many of the papers were slovenly done and more attention should be given to neatness and accuracy in working.

Agricultural Zoology. (200 Marks.) James Ritchie, M.A., D.Sc.

Over all, the knowledge of animals of agricultural interest displayed in the written examination was good; in particular, life-histories of pests were well handled, and a fair number of candidates showed commendable familiarity with recent research work, as in the cases of the life-cycles of the ox-warble fly and the frit fly.

In a large number of cases the practical examination was disappointing: there was shown especially a lack of acquaintance with common and important insect types and pests. It is obvious that theoretical knowledge of a pest and its control is of little value, if the pest itself is not recognized by the student.

Greater attention should be paid by candidates to the setting down on paper of their knowledge; a haphazard arrangement of facts gives an impression of muddled knowledge, whereas an orderly succession of paragraphs suggests that the writer has some grip of his information.

Veterinary Science and Hygiene. (200 Marks.) O. Charnock Bradley, M.D., D.Sc., M.R.C.V.S.

So far as my own subject is concerned and taken as a whole, the candidates showed a satisfactory knowledge of their work and reflected credit upon the teaching they had received. This is indicated by the fact that, while 11 obtained 75 per cent. (or more) of possible marks, only 4 failed to obtain the minimum necessary for a pass.

Generally speaking, weak candidates were at their weakest when dealing with questions of normal structure and function.

9. The thanks of the Board are again due to the authorities of the University of Leeds, for their liberality and courtesy in placing the Great Hall and other rooms of the University at the Board's disposal for the Examination; and to the Examiners, for the care and attention they bestowed upon the written answers to the papers set, and upon the *vivâ voce* examination.

Ernest Mathews,
Chairman.

16, Bedford Square, London, W.C.1.
September, 1925.

II.—REPORT ON THE RESULTS OF THE THIRTIETH EXAMINATION FOR THE NATIONAL DIPLOMA IN DAIRYING, 1925.

1. The Thirtieth Annual Examination for the National Diploma in the Science and Practice of Dairying was, by the courtesy of the Authorities, held for English candidates at the University College and British Dairy Institute, Reading, from September 4 to 12; and for Scottish candidates at the Dairy School for Scotland, Kilmarnock, from September 18 to 26.

2. Sixty-three candidates presented themselves at the English Centre. Of these, fifty-four took the whole examination,

while eight, who failed last year in the theoretical portion of the examination, and one who failed in Practical Work, were permitted to take those portions again on the present occasion. One candidate attained the "Honours" standard and thirty-nine others were awarded the Diploma:—

ENGLISH CENTRE.

Diploma with Honours.

STANTON GIBSON, B.Sc., British Dairy Institute, Reading.

Diploma.

LAURA A. ADLINGTON, Midland Agricultural and Dairy College, Kingston, Derby.
CHARLES D. BERRY, British Dairy Institute.
VIOLET BLOW, British Dairy Institute.
CHARLOTTE M. H. BUSH, Lancs. C.C. Dairy School, Hutton, Preston.
SARAH CAMPBELL, Lancs. C.C. Dairy School.
MARIAN A. CAUTLEY, British Dairy Institute.
ALFRED J. G. CLAY, British Dairy Institute.
ISABEL JOAN DAY, Lancs. C.C. Dairy School.
MOLLIE DAVIES-COOKE, Studley College, Studley, Warwickshire.
EVA FAITH DENNY, British Dairy Institute.
JOHN DYSON, East Anglian Institute of Agriculture, Chelmsford.
ROSALIND ELLERSHAW, British Dairy Institute.
MARY E. FAIRFAX-CHOLMELEY, British Dairy Institute.
WINIFRED K. FULLER, Lancs. C.C. Dairy School.
PAUL W. B. GATES, British Dairy Institute.
ALAN V. GIBBERD, British Dairy Institute.
HARRY OATES HIRST, Midland Agricultural and Dairy College.
STANLEY HITCHON, Midland Agricultural and Dairy College.
HELEN HOGGETT, Lancs. C.C. Dairy School.
ISABEL MARY HUDSON, British Dairy Institute.
BEATRICE MARY ILES, British Dairy Institute.
ROSAMOND JACKSON, Midland Agricultural and Dairy College.
REGINALD ALFRED JEFFERY, Midland Agricultural and Dairy College.
MARY KEEDWELL, Lancs. C.C. Dairy School.
SYBIL KENDRICK-LLOYD, British Dairy Institute.
DOROTHY KENYON, University College of Wales, Aberystwyth.
JESSIE CROSTHWAITE LAIDLAW, British Dairy Institute.
DOROTHY A. C. LONG, British Dairy Institute.
JOHN MILNE, British Dairy Institute.
BLODWEN K. OWEN, British Dairy Institute.
STELLA MARGARET PETERS, Studley College, Warwickshire.
ETHEL E. PRICE, British Dairy Institute.
OLIVE JANET ROBISON, East Anglian Institute of Agriculture.
ROLAND S. SULLIVAN, British Dairy Institute.
MARY E. TODD, British Dairy Institute.
ARTHUR WELLS, British Dairy Institute.
EDWARD B. WEST, British Dairy Institute.
ALLEN HEYWOOD WILSON, Midland Agricultural and Dairy College.
E. MONICA L. WOOD, British Dairy Institute.

3. Forty-nine candidates were examined at the Scottish Centre. Of these, thirty-four took the whole examination, ten, who had previously passed in the practical part, were permitted to appear for the remaining portion, and five sat for Chemistry and

Bacteriology only. One candidate reached the "Honours" standard, and thirty-four others were awarded the Diploma :—

SCOTTISH CENTRE.

Diploma with Honours.

ARCHIBALD MCVICAR, Achanelid, Glendaruel, Argyll.

Diploma.

ISABELLA ALEXANDER, Grudges, Tannach, Wick.
SARAH C. ANDERSON, Schoolhouse, Logie Coldstone, Dinnet, Aberdeen.
A. HUBERT ANGER, 6 Blythswood Square, Glasgow.
EVELYN S. BAKEWELL, 20 Belmont Road, Aberdeen.
MARGARET BROWN, 45 South Hamilton Street, Kilmarnock.
MARGARET CRAIG, Hollas, Grange, Keswick.
JOHN R. CURRIE, Drumadoon, Blackwaterfoot, Isle of Arran.
HELEN M. M. DALE, Bracklynn, Uplawmoor, Renfrewshire.
HARRIET G. DAWSON, Hilton of Fern, Brechin, Forfar.
MARY HELEN DEANS, South Fornet, Dunecht, Aberdeenshire.
MAY DICKIE, Ingram Place, Kilmarnock.
WINIFRED M. DRUMMOND, Ingersoll, Kilmarnock.
ELIZABETH FERGUS, Surrigarth, Skelwick, Westray, Orkney.
JAMES T. GEMMELL, Lochaber, Barnfield, Urmston, Manchester.
BERNARD J. HAIMES, Seale Hayne Agricultural College, Newton Abbot.
PHŒBE HALKETT, 19 India Street, Edinburgh.
HUGH MCCRAE, 22 St. Leonards Road, Ayr.
ALEXANDER MCGIBBON, Woodside Farm, Cambusbarron, by Stirling.
ANDREW MCKENZIE, 26 Belhaven Terrace, Wishaw.
MARGARET M. MACKENZIE, Westfield, Thurso.
MARGARET W. MACLEOD, 65 Caledonia Road, Saltcoats.
AGNES ADAM MEIKLE, 96 Albert Drive, Pollokshields.
AGNES R. C. MITCHELL, 12 Wellington Square, Ayr.
MICHAEL V. NENADOVITCH, Ramatcha, Kragujevatz, Serbia.
GERRIT D. LE ROUX, Vink River, Robertson, South Africa.
ROBERT R. SINTON, Kirkby Thore, Penrith.
JAMES S. SMITH, 20 Kemp Street, Hamilton.
MARGARET STRANG, Grasmere, 3 Hamilton Drive, Cambuslang.
STANLEY B. SUMMERS, Colinton, Prestwick.
WALTER WEIR, Burnfoot Cottage, Falkirk.
MARY I. S. WHITELAW, Queen Street, Castle Douglas.
THOMAS W. WILLIAMSON, Dickinson Place, Allonby, Maryport.
AGNES S. P. WHYTE, Newhouse Farm, Hallside.
WILLIAM C. WYLLIE, Whitehill Farm, Sanquhar.

All the candidates at the Scottish Centre had been students at the Kilmarnock Dairy School.

4. The Examiners at both Centres were: Richard H. Evans, B.Sc. (General Dairying, Practical Butter-making and Capacity for imparting Instruction); William Lawson, M.B.E., N.D.A. (Hons.), C.D.A. (Glas.), N.D.D. (Cheese-making); and Dr. J. F. Tocher, D.Sc., F.I.C. (Chemistry and Bacteriology).

Mr. Evans' report is as under :—

"*General Dairying—including Dairy Husbandry.*—At the Reading Centre most of the candidates appeared to have covered the syllabus of work fairly thoroughly, and in spite of the fact that, with one or two exceptions, there were no papers of outstanding merit sent in, the work accomplished, both in the written and the oral part of the Examination, showed that the students had a fairly good grasp of the subject.

"At Kilmarnock, however, while the candidates appeared to have mastered some portions of the syllabus fairly well, most of them found difficulty in answering the question on the use of bones as manure, as well as that on the construction of farm buildings. Further proof of this weakness was evinced in the oral examination.

"If the 1924 and the 1925 results are compared, it will be seen that the percentage number of those who failed to obtain a Pass mark in the above subject was practically the same at the Reading Centre, but at Kilmarnock there was a decided improvement in this respect. It should be borne in mind, however, that at both centres the number of those who attained Honours standard showed a decided decrease.

"*Practical Butter-making.*—In Practical Butter-making the candidates showed evidence of careful teaching. There is, however, still room for improvement at both centres in the making up of the finished product, and, at the Reading Centre, in the time taken in the carrying out of the work.

"*Capacity for Imparting Instruction to others.*—In this part of the Examination a fair number of the candidates showed good promise of becoming efficient teachers. Failure on the part of some of them to obtain high marks in this branch of the Examination was more often due to nervousness than to any lack of knowledge of the subject dealt with."

In his report, Mr. Lawson states that: "Taken as a whole the work of the Candidates in Cheese-making, both written and practical, was satisfactory; at both centres the percentage of failures in written and *vivâ voce* examination was less than in 1924, but, on the other hand, the percentage securing 65 per cent. or over of marks was less than in 1924, the figures being in 1924: Reading, 45 per cent., Kilmarnock, 40 per cent.; in 1925: Reading, 36 per cent., Kilmarnock, 31 per cent. This lack of really good candidates was equally noticeable in the practical work. The percentage of candidates obtaining 85 per cent. of marks or over in Hard Pressed Cheese-making were in 1924: Reading, 35 per cent., Kilmarnock, 58 per cent.; in 1925: Reading, 21 per cent., Kilmarnock, 8 per cent.

"The Candidates had a good general knowledge of the principles of cheese-making, but this knowledge was a little abstract. It would be desirable that candidates should be better able to judge the quality of the cheese made during the examination and recognize where they could have improved the quality of the finished product. This inability to judge the quality of the cheese made by them was particularly apparent at Kilmarnock, and many who had done well in written work were not able to describe the character of the curd produced.

"The arrangements for practical work at both centres were satisfactory."

Dr. Tocher reports as follows :—

"Since the proportion of failures at Reading last year was 28 per cent. there appears to be a slight improvement in the degree of preparedness of the candidates in 1925 when compared with 1924 at that Centre. The proportion of failures in Kilmarnock last year was very high—53 per cent.—and since the proportion of failures this year is 23 per cent. there appears to be a marked improvement in the degree of preparedness of the candidates at Kilmarnock this year. The candidates generally possessed a better knowledge of the elementary principles of bacteriology than of general elementary chemistry. They appeared, however, to be inadequately prepared in the classification of bacteria generally, and, in particular, as to the fundamental difference between pathogenic and non-pathogenic organisms and their relations to milk supplies. Many of the candidates showed an inadequate knowledge of the fundamental differences between butter and margarine. The want of knowledge on the part of many candidates was evidently due to the fact that there had been no recent study of general elementary chemistry or of the technical branches of chemistry applicable to dairying. A few of the candidates showed a fairly good knowledge of the chemical constitution of the substances met with in dairying. In this connection, however, there appears to be a falling off in the degree of preparedness of the candidates. Many of the candidates showed an inadequate knowledge of the simple methods of chemical analysis of milk and butter. Several blunders were made in answering the simple question bearing on the determination of solids-not-fat in milk."

ERNEST MATHEWS, *Chairman.*
T. B. TURNER, *Secretary.*

16 Bedford Square, London, W.C.
October, 1925.

ANNUAL REPORT FOR 1925 OF THE PRINCIPAL OF THE ROYAL VETERINARY COLLEGE.

ANTHRAX.

THE following table shows the number of confirmed outbreaks of this disease in each year since 1917:—

Year.	Outbreaks.	Animals attacked.
1918	245	282
1919	234	314
1920	459	547
1921	505	649
1922	515	603
1923	721	841
1924	713	834
1925	669	774

These figures show that during the years 1918–23 the number of outbreaks increased by almost 300 per cent, and that the incidence of the disease has varied only slightly during the last four years. Previous reports contain the figures for the years preceding 1918, and show that in 1914 the outbreaks numbered 722, and that these had fallen to 421 in 1917. In annual reports before the recent war the view was put forward that in the great majority of the cases of anthrax in this country the animals owe their infection to foreign feeding stuffs or manures which contain the spores of the disease, and the war may be said to have proved the correctness of this theory. It was the diminished amount of these foreign materials imported during the last three years of the war, owing to interference with shipping, that reduced the outbreaks in 1918 to one-third of the number in 1914, and, similarly, the restoration of the freedom of the seas, with consequent increased importation of feeding stuffs and bone manures, explains the gradual rise in the number of outbreaks until in 1921 the disease resumed what may be called its normal incidence.

This theory with regard to the causation of anthrax in Great Britain carries with it the conclusion that, while the measures enforced under the Anthrax Order are well designed to prevent the disease from spreading where a case has occurred, they cannot be expected to have any notable effect in reducing the number of outbreaks, because they leave untouched the main source of infection.

It will be noted from the table that during each of the last three years over 800 animals have been lost from this disease, and, as the immense majority of the victims are cattle, the annual loss can hardly be put at less than £20,000, or more than £30,000. These figures will have to be kept in mind before any attempt is made to reduce the number of outbreaks by prohibiting the importation of unsterilised manures or feeding stuffs from countries in which anthrax is known to be a common disease.

GLANDERS.

The following table shows the number of outbreaks and the number of horses attacked in each of the last seven years :—

Year.	Outbreaks.	Animals attacked.
1919	25	61
1920	15	22
1921	11	42
1922	4	4
1923	8	13
1924	2	3
1925	2	2

In order that the full importance of these figures may be realised, it ought to be stated that in 1904 over 1,500 outbreaks of this disease were reported in Great Britain. Thanks to voluntary efforts, including the use of the mallein test, the outbreaks had fallen to 854 in 1907, but it was then recognised that much stronger measures than those then in force would be required if the object in view was the complete eradication of the disease. A new Glanders Order was therefore issued and came into operation on January 1, 1908. It indirectly enforced the application of the mallein test to every animal of a stud in which a case of glanders had been detected, and compelled the immediate slaughter, with reasonable compensation, of all the reacting horses. The result was a steady reduction in the number of outbreaks, until in 1917 only 25 were reported. At the end of every year since that it has been expected that the next would be a blank as regards glanders, but even the last has been a disappointment in that respect, since two cases were reported during the year. One of these occurred in Hertford in February and the other in Surrey in April, but the latter was not confirmed on examination of material by the Ministry of Agriculture. Having regard to all the facts, it appears to be justifiable to conclude that the country is at last free from the disease.

SHEEP SCAB.

The reported outbreaks of this disease in each of the last eight years were as follows :—

Year.	Outbreaks.
1918	351
1919	438
1920	479
1921	757
1922	683
1923	646
1924	575
1925	670

In the previous Annual Report it was said that judgment with regard to the success of the Sheep Scab Order of 1923 would have to be suspended, as its most important provision did not come into operation till July 1, 1924. That was the provision which, in any case in which sheep scab was found to exist, laid on the owner the burden of proving that the order had been complied with.

As the order had been in full force for 18 months at the end of 1925, the figures in the table indicate its complete failure to make any impression on the disease.

In view of the failure of all the efforts hitherto made to eradicate the disease the Ministry has prepared a draft order designed to eradicate sheep scab with the minimum of interference with the sheep trade consistent with the object in view. The principal effect of this order will be to ensure that between July 15 and August 31 all sheep throughout Great Britain shall be double-dipped, except in any county declared by the Ministry to be exempt on the ground that it has been free from scab for at least the two preceding years. It will be within the absolute discretion of the Minister to declare a county exempt in which an isolated outbreak of scab had occurred originating from outside sources.

During the period July 15 to August 31, restrictions will be imposed on the movement of sheep from one district to another to prevent evasion of double-dipping and mixing of dipped and undipped sheep.

It is important to notice that the provisions of the Infected Areas Double-Dipping Order of 1920 will continue to be applied by the Ministry to areas where sheep scab is most prevalent or is suspected to exist unreported; but elsewhere, except in infected places, there will be no compulsory dipping and no restriction on movement save during the period July 15 to August 31.

Under the new order, therefore, it will no longer be permissible for local authorities to make regulations requiring the double-dipping of sheep moved into their districts from other counties.

Within recent years the view that the eradication of sheep scab from this country is possible has often been urged upon the Ministry, and the new draft order may be regarded as the answer to this pressure. It virtually calls upon those who are interested in the sheep industry to decide whether they will accept the measures considered necessary for the eradication of sheep scab, or, alternatively, agree to the continuance of measures that will merely hold the disease in check. The suggested new policy has received the approval of the Council of the Society, and, provided at the same time an increased effort is made to deal with the disease in the mountain regions in which it has hitherto had a permanent home, there appears to be good reason to expect that it will succeed.

SWINE FEVER.

The following table shows the number of outbreaks of the disease during each of the last ten years:—

Year.	Outbreaks.
1916	4,331
1917	2,104
1918	1,407
1919	2,305
1920	1,816
1921	1,262
1922	1,390
1923	1,968
1924	1,441
1925	1,643

The table covers the period during which the present method of dealing with the disease has been in operation, and at first sight the facts disclosed in it may appear to prove that the method has failed. A knowledge of the history of the disease prior to 1916, however, suggests a different opinion. For 23 years (1893–1916) the Board of Agriculture applied to the disease measures that were designed to eradicate it. During that period all diseased and suspected pigs were slaughtered, with compensation to the owners, and at the same time serious restrictions on movement of pigs in infected areas were enforced. At one time there appeared to be a good prospect that the methods would succeed, for the outbreaks had fallen from 5,682 in 1894 to 817 in 1905. Unfortunately the latter year proved to be a turning point for the worse, and by 1914 the annual outbreaks had risen to 4,356. As stamping-out measures had thus failed and were enormously expensive, it was agreed, with the general consent of those specially interested, that the attempt to eradicate the disease should be given up, compulsory slaughter of suspected pigs being abandoned and the loss which the disease entails allowed to fall on the owners, who were encouraged to use anti-swine-fever serum to bring outbreaks to an end. The new measures were intended to control the disease—not to eradicate it, and that is to be kept in mind in interpreting the figures given in the table. Judged from that standpoint, they are not unsatisfactory, although the outbreaks have been more numerous in 1925 than in the previous year.

PARASITIC MANGE IN HORSES.

The incidence of this disease during the last nine years is shown in the following table :—

Year.	Outbreaks.	Animals attacked.
1917	2,614	4,873
1918	4,483	8,422
1919	5,003	9,773
1920	3,564	3,812
1921	2,055	3,108
1922	1,035	1,454
1923	789	1,119
1924	664	950
1925	513	810

In the last complete year before the war the outbreaks numbered 2,383, and the figures for the last year are therefore highly satisfactory.

FOOT AND MOUTH DISEASE.

The number of outbreaks of this disease confirmed during each of the last five years was as follows :—

Year	Outbreaks	Animals slaughtered as Diseased or Suspected
1921	44	3,085
1922	1,140	55,599
1923	1,854	125,098
1924	1,440	88,726
1925	260	19,963

Tables I and II show the dates of the outbreaks in 1925 and the counties in which they occurred.

No outbreaks were reported in the interval between May 9 and the end of June, and there were three shorter periods during which the country appeared to be free from the disease.

TABLE I.

Week ended	Jan. 17	Jan. 31	Feb. 14	Feb. 21	Feb. 28	Mar. 7	Mar. 14	Mar. 28	April 25	May 2	May 9	July 4
Nottingham	1											
Sussex E.		4										
Northampton			1						1	1	1	
Norfolk				1								
Warwick				3	1						1	
Worcester					1							
Chester						1	1				1	
Isle of Wight							1					
York, W. Riding								1				
York, E. Riding												1

TABLE II.

Week ended	Aug. 1	Aug. 22	Sept. 26	Oct. 3	Oct. 17	Oct. 24	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 28	Dec. 31
Southampton	2	1												1		
Buckingham			1													
Dorset				2												
Sussex, E.					1	1	1		1							
Chester						1	2									
Lancaster						12	32	9	5	2		1	1		2	
Wiltshire						10	11	10	5	6	4	3	2		1	1
York, W. Riding						5	5	3	2		1		1			
Leicester							2	4	2	3	3		1			
Northampton							4	2	1							
Rutland							2									
Warwick							6	1	1	1						
Derby								3	2		1	1		1		
Essex								1		2					1	
Oxford								1		1	1	1				
Gloucester									1	4	1	3	2	1		1
Stafford									2		5	5	3	2	3	3
Berkshire											1					
Lincoln											2					
Glamorgan											1					
Sussex W.												1				

During the last four years the amounts paid in compensation for animals slaughtered in connection with outbreaks have been as follows :—

	£
1922	803,529
1923	2,209,781
1924	1,389,696
1925	270,000[1]

In the preceding annual report reference was made to the question whether the stamping-out method of dealing with outbreaks, which has been consistently followed in this country during the last thirty years, has been justified by the results; and, by way of answer to the question, statistics were given to show, for comparison with those in Great Britain, the number of outbreaks in the nearest countries of Europe in 1923 and the first nine months of 1924. For the same purpose, it has been thought well to include in the present report the following figures[1] (Tables III and IV) for the years 1924 and 1925. The number of animals attacked with the disease in foreign countries has not been obtainable, and it is important to notice that the figures given in the Tables are those of outbreaks.

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[1] The figures for 1925 are approximate only.

TABLE III.

Month, 1924	Great Britain	Germany	Holland	Belgium	France	Denmark
January . .	582	1,897	211	436	2,181	2
February . .	308	2,188	369	500	1,697	16
March . . .	215	2,838	2,397	755	1,633	26
April . . .	65	1,148[2]	4,746	1,172	936	23
May . . .	33	1,124	9,419	1,506	754	10
June . . .	59	1,224	14,914	1,654	1,012	2
July . . .	73	1,710	22,581	3,016	2,426	5
August . .	57	3,363	20,692	5,116	3,326	6
September .	9	3,749	7,757	4,835	1,945	14
October . .	16	4,961	3,420	7,166	2,020	122
November . .	19	5,985	1,224	6,318	1,057	1,383
December . .	4	6,112	1,200	4,813	825	6,332
Totals .	1,440	36,299	88,930	37,287	19,812	7,941

TABLE IV.

Month, 1925	Great Britain	Germany	Holland	Belgium	France	Denmark
January . .	5	3,710	625	1,237	922	8,050
February . .	7	2,286	239	395	613	7,862
March . . .	4	1,548	145	253	505	6,491
April . . .	2	1,448	275	182	692	4,061
May . . .	3	1,171	923	164	629	2,941
June . . .	—	2,007	2,243	138	1,000	2,609
July . . .	1	3,712	4,491	157	1,641	2,960
August . .	3	3,914	7,521	112	1,999	3,542
September .	3	2,643	7,823	57	2,351	3,658
October . .	96	2,639	4,307	85	3,217	5,108
November .	101	2,483	1,205	103	2,044	3,781
December . .	35	5,011	1,042	125	1,391	2,554
Totals .	260	32,572	31,039	3,008	17,004	53,617

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[1] Supplied by the Ministry of Agriculture.

[2] Figures incomplete.

It is obvious that these figures do not directly provide all the information necessary for a close comparison of the loss inflicted by the disease on each of the countries, first, because they do not show the number of animals attacked, and, secondly, because in the continental countries, where the slaughter policy is not in force, no compensation falls to be paid by the State. Fortunately, however, there are indirect methods by which one may form an estimate of the loss sustained by each country.

Facts that have to be noted at the outset are: (1) that the number of outbreaks in this country during the two years included in the above Tables was 1,775, (2) that the total number of animals slaughtered as diseased or suspected in connection with these outbreaks was 121,880 (an average of 68 per outbreak), and (3) that the total amount paid in compensation was £1,659,696 (an average of £15 per head).

Turning now to Tables III and IV it will be seen that during the same two years the outbreaks in Belgium numbered 40,295, and, if one allows 30 animals for each outbreak (instead of 68 in Great Britain), the total number attacked must have been approximately 1,208,850.

The loss falling upon the owners of these animals includes, first, the actual deaths, and, secondly, the deterioration of value in the animals that recovered. With regard to the first of these, it has to be observed that two opposed and equally erroneous opinions appear to be widely held in this country at the present time, the first being that foot-and-mouth disease is usually fatal, and the second that all animals recover from it. The fact is that the death rate varies from 0 to 50 per cent. in different outbreaks, depending upon the nature of the animals (young or old, breeding or non-breeding), the care bestowed on them, and, above all, the virulence of the disease. Wide experience gained during the forty years when the disease prevailed in this country placed the death rate at 3 per cent., but in many parts of Europe during recent years the disease appears to have been of a specially virulent type, and probably 5 per cent. would be a fairer estimate. If, however, it is estimated to have been only 3 per cent., that would mean the actual death from the disease in Belgium of 36,264 animals during 1924 and 1925; and if these are valued at £10 per head (instead of the £15 found to be the value of the animals slaughtered in Great Britain) that makes the loss from deaths £362,640. To that there falls to be added the loss from deterioration in the condition and value of the animals that recovered, which at £3 per head amounts to £3,517,758.

Estimated in this way, the total loss which the disease caused to stockowners in Belgium in 1924 and 1925 amounted to £3,880,398. In the same two years the amount paid in compensation for animals slaughtered in this country was £1,659,696.

Anyone can easily estimate in the same way, for himself, what was the probable loss which the disease caused in the other countries included in the Tables, but the case of Denmark requires special notice.

Denmark is the country that most closely resembles Great Britain in matters connected with foot-and-mouth disease. For the most part the country stands detached from the Continent, and on that account it has, like Great Britain, until lately escaped with comparatively little loss from the great wave of outbreaks that has swept over nearly the whole of Europe.

Until towards the end of 1924 the measures adopted to control the disease were fairly successful (*see* Table III), but in November of that year the disease got out of hand, and in the following month over 6,000 outbreaks occurred.

The bare figures in the right-hand columns of Tables III and IV are eloquent of the calamity that would have overtaken animal husbandry in this country if the stamping-out policy had been abandoned in 1922, and which may yet overtake it if stockowners conceal the existence of the disease or neglect to give prompt notification of suspicious symptoms in their animals.

In view of the incompleteness of the information obtainable regarding outbreaks, only an approximate estimate can be formed of the loss inflicted by the disease in foreign countries, but one is on much firmer ground when endeavouring to calculate what it would have cost this country if it had had in 1925 as many outbreaks as Denmark, *viz.* in round numbers 53,000. Judging from the experience of the last four years, each of these would have involved 67 animals, or a total of over 3½ millions, and, on the well-founded calculation that 3 per cent. of these (valued at £15 per head) would have died, and that the deterioration of the remainder would have averaged £3 per head, the total loss inflicted directly on the owners in one year would have been over 10½ million pounds.

This should be measured against the £270,000 which the State paid during the year to prevent what has occurred in Denmark.

And, in conclusion, it must be pointed out that, in consequence of the consistent application of the stamping-out policy, this country continues to have an infinitely better prospect than any of those in which measures of isolation are employed to prevent the spread of the disease.

The experience of the past year gives good ground for expecting that in this country the disease will not again make the alarming headway that it did in 1923 and 1924, but the figures for the other countries hold out no hope of any improvement in the near future.

THE TUBERCULOSIS ORDER OF 1925.

Reference is made to this order here mainly to call attention to the obligations which it imposes on owners of cattle. These relate to (1) notification, and (2) the precautions to be taken with regard to milk and the isolation of suspected animals.

Article 2 of the order makes it the duty of every person who has in his possession or in his charge

(i) any cow which is, or appears to be, suffering from tuberculosis of the udder, indurated udder or other chronic disease of the udder; or

(ii) any bovine animal which is, or appears to be, suffering from tuberculous emaciation; or

(iii) any bovine animal which is suffering from a chronic cough and showing definite clinical signs of tuberculosis

without avoidable delay to give information of the fact to a constable of the police force for the area wherein the animal is, or to an Inspector of the Local Authority.

Under Article 11 every animal affected in the manner specified above shall as far as practicable be kept isolated from other bovine animals, and the owner must keep such animals in his possession or under his charge until they have been examined by a Veterinary Inspector in accordance with the provisions of the order and the owner or person in charge has been notified that this Article has ceased to apply to the animals.

Article 10 is as follows: The milk produced by any cow which is, or appears to be, suffering from chronic disease of the udder or tuberculous emaciation or is suffering from a chronic cough and showing definite clinical signs of tuberculosis, shall not be mixed with other milk until the cow has been examined by a Veterinary Inspector in accordance with the provisions of this order, and until either six weeks after the examination have expired to enable microscopical and biological tests to be carried out if necessary or the owner or person in charge thereof has been notified that this Article has ceased to apply to the cow; and all milk affected by this Article shall forthwith be boiled or otherwise sterilised, and any utensil in which such milk is placed before being so treated shall be thoroughly cleansed with boiling water before any other milk is placed therein. These provisions shall also apply to the milk of a cow in relation to which a notice of intended slaughter has been served from the date of the service of the notice until the slaughter of the animal.

Under Article 4 when a Local Authority receives information that there is reasonable ground for supposing that on any premises in their district there is a cow which is suffering in the manner specified above, their Veterinary Inspector may at all reasonable hours enter on any part of the premises and examine any bovine animal thereon, and the Veterinary Inspector may require any cow on the premises to be milked in his presence, and may take samples of the milk, and the milk from any particular teat shall if he so require be kept separate, and separate samples thereof shall be furnished. The Inspector may also take samples of the fæces or urine of any bovine animal on the premises, or of any abnormal discharge from any bovine animal thereon.

The occupier of the premises and the persons in his employment shall render such reasonable assistance to the Inspector as may be required for all or any of the purposes of this Article, and any person refusing such assistance shall be deemed guilty of an offence against the Act of 1894.

Under the same Article the consent of the owner in writing must be obtained by an Inspector before he applies the tuberculin test to any cow or bovine animal which in his opinion comes within the terms of the order.

The provisions of the order with regard to cows are intended to secure notification only in the case of animals that are presumably affected with tuberculosis in a manner that involves danger to human health, and it is obvious that the order presupposes on the part of an owner some knowledge regarding the symptoms of tuberculosis of the udder, indurated udder, and chronic disease of the udder.

Briefly stated, the following are the distinctive signs of tuberculosis of the udder.

The disease begins without any of the signs of acute inflammation (heat, redness, or tenderness) and without the marked changes in the amount and appearance of the milk that are usually present in ordinary cases of garget.

Usually the first discoverable sign of tuberculosis of the udder is an induration or hardening of the substance of one or more of the quarters. If the indurated part, while still remaining insensitive to moderate pressure, steadily increases in extent the case is probably one of tuberculosis and ought to be notified forthwith. With the further progress of the disease the milk from the affected quarter diminishes in amount, and eventually becomes decidedly abnormal in appearance, but the owner should not wait for this symptom when those previously mentioned have been detected.

Turning next to the question of what constitutes indurated udder or chronic disease of the udder, it will be gathered from what has already been said that tuberculosis of the udder is nearly always a chronic disease, and that it always leads to induration of the affected part. There are, however, other forms of udder disease of which the course may become chronic, and which may end in induration of the udder. Some of these may occasion difficulty in diagnosis even to an experienced veterinary surgeon, and that is obviously the reason why the order requires such cases to be notified.

While owners should therefore be advised not to decide in a doubtful case that the disease of the udder is not tuberculous, it may be stated that the chief differences between the tuberculous and the non-tuberculous cases of chronic udder disease are the following:—

1. In tuberculosis of the udder the disease is chronic from the outset, and as it proceeds the affected quarter becomes larger and more and more indurated.
2. In the great majority of non-tuberculous cases of chronic udder disease the quarter at the outset shows the usual signs of acute inflammation (sudden swelling, tenderness, and marked changes in the milk), and when at a later stage induration occurs the quarter usually becomes smaller than it was originally.

In conclusion it may be well to refer to another matter about which the owner or person in charge may feel doubt, viz., the provision of the order with regard to cases of tuberculous emaciation. When in a bovine animal emaciation is the only symptom of disease it is usually not the result of tuberculosis. It may be due to different causes, but when the emaciation is accompanied by diarrhœa and these are the only symptoms the case is probably not one of tuberculosis but of Johne's disease, and notification is therefore not necessary.

RESEARCH.

For the purpose of investigations which are being conducted in the Research Institute at the Royal Veterinary College, members of the Society are invited to communicate with the Director, when the occasion arises, regarding any of the following diseases:—

1. Abortion in Mares.
2. Johne's disease.
3. Outbreaks of udder disease in cows.
4. Outbreaks of fatal diarrhoea in lambs or calves.
5. Cases of quarter-evil or "Struck" in calves or sheep.

J. McFADYEAN.

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ANNUAL REPORT FOR 1925 OF THE CONSULTING CHEMIST.

THE number of samples sent by members has been only slightly less than in 1924. The total is 341 as against 355 the previous year. In addition, there were fourteen samples of Cider examined in connection with the Society's Country Show at Chester.

There is little to record in the way of fresh materials coming forward in respect of either fertilisers or feeding stuffs. The use of ground mineral phosphates, principally from North Africa, has, however, considerably increased.

Prices generally have been very stable, more especially as regards fertilisers, and have remained favourable to purchasers.

As regards the prevalence of adulteration, there have been but few instances of this with samples submitted to me by members. Adulteration of offals, however, has been by no means infrequent throughout the country, and the addition of tapioca meal to ground Oats, Barley Meal, etc., has come in as a new form, while, to some extent, the use of ground Rice husk as an adulterant of feeding stuffs still continues.

An instance of the occurrence of Castor Oil bean in Earthnut Cake was brought to light and will be referred to later.

Instances, however, have not been infrequent of considerable variation in the composition of deliveries. This applies more particularly to Basic Slag and North African Phosphates.

In last year's report I referred in some detail to my visit to the Alsace Potash Mines, and to the possibility of competition between these products and those from the German Potash Mines, a competition which was likely to result in advantage to the agriculturist. It would appear, however, that a working agreement has now been come to between the different interests, though happily without, at present, increasing the cost of the materials to the farmer.

Chief among the events of the year has been the continuation of the work of the Departmental Committee on the Fertilisers and Feeding Stuffs Act, subsequent to the issue by that Committee of their report. An Advisory Committee was appointed to draw up schedules and definitions of articles that would come under the provisions of the Act. This Committee—on which the R.A.S.E. was represented by Mr. J. L. Luddington, the Chairman of the Chemical Committee—has duly reported. The draft report was circulated and considered by the Chemical Committee of the R.A.S.E. and a general approval given to it. At the same time, suggestions having been invited, the Chemical Committee sent theirs in, emphasising in particular the following points which seemed to them desirable of inclusion :—

1. That in regard to Feeding Stuffs—where foods are sold under a name indicating that they are made of a single ingredient, e.g. Barley Meal, Bran, Middlings, Bean Meal, etc.—there should be simply a guarantee as to their being *pure*.
2. That in the case of Fertilisers there should be a guarantee that they be in good condition and suitable for application to the land.
3. That the proposed grading of offals is not practicable nor desirable.
4. That materials such as lime, soot, shoddy, etc., should be included under the Act.

These suggestions would appear to have been considered and adopted as far as possible, and it is understood that a Bill is now being drafted on the lines of the report.

The question of Unexhausted Manure Values, chiefly as regards foods consumed on the farm, has again come up and has been considered by a committee of agricultural scientists convened by the Ministry of Agriculture, and subsequently by representatives of those engaged in the work of practical valuation. It was, however, not found possible to come to any definite agreement on the data which at present exist, and the matter is held over for the time being.

Meanwhile, in response to a request from the Central Association of Agricultural Valuers, I went into the matter afresh on the lines and suggestions of the Conferences referred to, and, as the result, I drew up a revised scale for Feeding Stuffs. The main feature of this, besides necessary alterations of unit prices consequent on the fall in value of manurial constituents, consists in the simplification of the Tables by the omission of the third and fourth columns hitherto given (foods used direct on arable or grass land) and the retention only of the two columns for first and second year of application. Experience had shown that the third and fourth columns were but little used in practice, whilst scientific opinion as regards the greater value of cake, etc., fed on arable or grass land has undergone some modification.

A further feature is the inclusion, in the Tables, of Compound Cakes. This step was warranted inasmuch as many of these cakes possess considerable manurial value, and value much above that of corn with which, in many parts of the country, it had been the custom to class them.

The Tables, as revised up to September, 1925, have now been issued by the Central Association of Agricultural Valuers, 2 Whitehall Court, S.W.1, and are obtainable there.

The revival of the issue of "Occasional Notes" giving information regarding the activities of the different scientific departments of the Society was referred to in last year's Report, and it was hoped that another such issue would be made in 1925. Consequent, however, on the paucity of material which was forthcoming, the issue of this has been postponed.

An interesting feature of the year has been the institution of conferences at the Rothamsted Experimental Station on agricultural topics. It is sought in these to bring together scientists and practical men, the meetings consisting of the reading of short papers followed by discussion and suggestions. Three such conferences have so far been held : the first on March 6 on Green-manuring ; the second on May 22 on Lime ; and the third on November 20 on the Manuring of the Potato Crop.

These conferences were all increasingly successful, besides affording an opportunity of making the work of the Rothamsted Experimental Station chiefly, and incidentally that of Woburn and other places, better known.

I had the privilege of opening the first two conferences with papers dealing principally with the work done at Woburn on these subjects for many years past.

In the Chemical Department especially—as with the R.A.S.E. and the agricultural world generally—a heavy loss has been sustained by the death of Sir Bowen Bowen-Jones, Bart., who was Chairman of the Chemical Committee from 1901 to January, 1915. Sir Bowen always took a great interest in the work of the Committee and was a good friend of the Woburn Experimental Station, the importance of the work of which he maintained to the end.

Passing to individual subjects which have engaged my attention during the year, I deal with these in succession.

A. Feeding Stuffs.

1. *Linseed Cake.*

The price of this, starting with £13 2*s*. 6*d*. per ton in January, ranged from £13 to £13 7*s*. 6*d*. until September, after which it fell to £12 15*s*., and to £12 5*s*. in November.

Of the samples sent to me by members I can say that whenever these have been sold as pure, they have been found to be so, and, as a rule, to come up to guarantee.

2. *Cotton Cake.*

Much the same remark applied to this. Decorticated Cotton Cake has seldom come to the fore, though samples of the Meal are occasionally sent. The price of Undecorticated Cotton Cake ranged from £8 5*s*. per ton to £7 12*s*. 6*d*. per ton, at which latter figure it continues. Bombay Cotton Cake has been about £1 a ton cheaper.

3. *Groundnut (Earthnut) Cake.* *Occurrence of Castor Oil Bean.*

The price of Groundnut Cake has throughout been £13 5*s.* per ton.

A case calling for special note occurred in the use, by a member for his cattle, of a mixed food of which Groundnut Cake was one of the constituents. The Groundnut Cake had been separately purchased and consisted of two kinds, one being of thick pieces and purchased in Yorkshire, and the other of thin flakes and purchased at Liverpool.

The member, after mixing the Cake with Cotton Cake and home-grown meals, fed it to his cattle (65 in number), and, shortly after, one of these died and a number of others were found to be in a serious condition.

On analysing the mixed food given to the cattle, I found Castor Oil bean to be present, and, on examining the ingredients separately, I traced the Castor Oil bean to the thin, or flaked, Groundnut Cake, the thick variety and other ingredients being free from it. The injury to the cattle was confirmed by a post-mortem and by veterinary examinations. No other animals died, but all were seriously deteriorated and never got thoroughly well, so that they were eventually sold at considerable loss. The vendors of the cake met the member honourably and a settlement on a liberal scale was come to.

4. *Coconut Cake, Palm-nut Meal, etc.*

A few samples only of these were sent, and there is nothing special to report regarding them.

Coconut Cake ranged in price from £12 per ton to £10 10*s.* in April, falling later to £10 per ton.

Palm-nut Meal (extracted) cost throughout £7 15*s.* or £8 per ton.

5. *Rice Meal.*

Italian Rice Meal.

The price of this, beginning at £9 per ton, went down to £8 per ton, at which figure it stands.

There still seems to be some uncertainty as to what Rice Meal should, or should not, be. As has been previously pointed out by me, Rice Meal should properly be the bran or skin covering the inner, or white, grain of the rice, and should not contain the outer husk or "shude." Unfortunately, it not infrequently happens that the true meal is mixed with some of the finely ground and objectionable husk.

At the same time, certain varieties of Rice Meal are known to be always of inferior nature. One such is known in the trade as "Italian" Rice Meal. Under the name of "Fumetta" Rice Meal (Italian), and costing £6 5*s.* per ton delivered, there was sent to me a sample the analysis of which had been guaranteed. The following, giving these figures and also those of my own analysis, show how widely the two differed :—

	As guaranteed. Per cent.	As found. Per cent.
Moisture	8·64	10·75
Oil	1·85	1·09
Albuminoids	10·50	4·25
Carbohydrates, etc.		39·20
Woody Fibre		27·73
[1] Mineral matter		16·98
		100·00
Nitrogen	1·68	0·68
[1] Including Silica and Sand		15·45

The high percentages of Silica and Woody Fibre shown in my analysis were due to the presence in the meal of the finely ground "shudes," and this meal should not have been sold under the name of "Rice Meal."

The consignment was eventually returned to the vendors.

6. *Compound Cakes and Meals.*

I am able to supplement the good report which I gave last year in regard to the improvement both of quality and in the nature of the materials used in these foods.

These and other considerations have prompted me to advocate the inclusion of compound cakes and meals in my Tables of Unexhausted Manure Values, grading them according to their nitrogenous contents, and not classing them, as was usual before, simply as corn.

The improvement of compound cakes is one of the marked features of later days, and I am free to admit that my views have undergone considerable modification regarding their use. One previously had to regard these cakes with some suspicion because of their often being made the media for the inclusion of materials of practically worthless nature or of doubtful quality. But there is no denying the advantage of a mixed food for stock and the convenience of such feeding, and now that these materials have to be sold by guaranteed analysis and that there has been such all-round improvement in their manufacture, many of the objections previously urged against them disappear.

Notwithstanding what has been said, it is important that the quality of compound foods should be checked, as it occasionally happens, as in the instance now to be mentioned, that foods stated to be made up in a particular way are found not to comply with the description given.

A sample of Pig Nuts sent me and which was supposed to be composed of 60 per cent. Barley Meal, 30 per cent. Middlings with 10 per cent. Fish Meal, and costing £12 2*s.* 6*d.* per ton, was examined and I found that, instead of being mainly Barley Meal, it consisted chiefly of Palmnut Meal, along with Rice, a little Wheat and some Peas, the Fish Meal being, as I stated, "notable rather by its absence than by its presence." On the purchaser complaining, a refund of 50*s.* a ton was allowed.

7. *Cereals, Offals, etc.*

It is, as stated, with these materials that adulteration is found to be most frequent. Besides the admixture of finely ground husk such as that of Oat husk, Rice shudes, etc., a newer form of adulteration, *viz.*, the addition of Tapioca Meal, has recently become prominent. Instances of this are given in the following cases which came under the Fertilisers and Feeding Stuffs Act and with which I was concerned.

(1) Sussex Ground Oats.

A sample sold under this name was found to consist of only about 50 per cent. of Oats, the rest being made up of Oat shudes, Wheat, and some Tapioca.

A fine of £10 and £14 costs was inflicted.

(2) Sussex Ground Oats.

In this the proportion of Oats was somewhat higher than in the last, but the sample contained Oat shudes, Rice and Wheat in considerable amount.

A fine of £10 and £5 5*s.* costs was imposed.

(3) "Dan" (Sharps).

This sample, instead of being the pure offal of Wheat, was found to be a mixture, half and half, of coarse Middlings and Tapioca Meal.

A penalty of £3 with £13 10*s.* 2*d.* costs was incurred.

A member of the Society sent me a sample of what had been sold to him as a feeding material at £5 10*s.* per ton delivered. The analysis was as follows:—

Moisture	10·72
Oil	7·44
Albuminoids	8·56
Carbohydrates, etc.	42·98
Woody Fibre	13·56
[1] Mineral matter	16·74
	100·00
Nitrogen	1·37
[1] Including Sand and Silica.	12·35

I found this to be nothing but a refuse material consisting mainly of finely ground Oat husk and Rice husk. It will be noticed that the analysis showed high percentages of woody fibre and siliceous matter. The presence of Rice husk in particular is very objectionable, and such a material as this should not have been sold as a feeding stuff at all.

EWE'S MILK.

The following analysis of milk from a Hampshire Down ewe may be of interest :—

Water	72·34
Fat	9·65
Solids-not-fat	18·01
	100·00

B. FERTILISERS.

1. *Superphosphate.*

The price of this has remained very steady. It has been about £3 per ton for 30 per cent. "soluble" and £3 10*s*. per ton for 35 per cent. "soluble."

In the course of the year an application was made by the manufacturers of Superphosphate to have this particular part of their industry "protected" on account of the unremunerative return consequent on competition from abroad. The application was strongly opposed by the farming interests, and, at first sight, the opposition seemed warranted, inasmuch as any change might result in prices being higher and the farmer having to pay more. On closer examination of the question, it had to be recognised that there was another side to it, and that, in their anxiety to get Superphosphate cheaply, the farming industry might be playing into the hands of foreign manufacturers who, by "undercutting" as against the home manufacturers, might eventually raise prices, and the farmer might, in the end, have to pay more than at present and find that, meantime, the home industry had been destroyed. Moreover, it was generally recognised that the manufacture of Superphosphate as an item by itself did not pay, and that it was really only for the sake of the making up of compound manures (of which it formed a part) that it was at all remunerative.

It is not for me to discuss the relative merits of the case, but I felt bound to point out to my agricultural friends that there were other interests besides their own immediate ones that had to be taken into consideration.

Though the report of the Committee appointed, under the Safeguarding of Industries Act, to enquire into the subject was not unanimous in its conclusions, the application was in the end not acceded to.

Superphosphate Containing Excess of Moisture.

Superphosphate containing excess of water, and especially any excess of free acid (whether due to sulphuric acid or to phosphoric acid), is apt to destroy the bags in which it is packed, and, in the manufacture, care has to be taken to neutralise any such acidity.

The following case, however, was new to my experience. A member sent me a sample of Superphosphate, complaining that it not only burst the bags in which it was packed, but also that, when put on grass land at the rate of 4 cwt. per acre, it scorched this and the grass did not recover for some time.

To all appearance the superphosphate was in good condition, and I did not find it to be more than usually acid, but it had a high percentage of moisture. Though inclined to doubt the statement of the member, I thought it well to try the superphosphate at the Woburn Experimental Farm and see whether it did the damage complained of. My observations confirmed the statement made, and, on comparing with this superphosphate some that I was using myself on the farm, I found that the latter did no damage. Accordingly, I analysed the two superphosphates very completely. They had practically the same amounts of soluble and insoluble phosphates and there was no difference in acidity or in the presence of free phosphoric acid. The sole difference was in the moisture; while my Woburn sample had only 13·2 per cent., the sample complained of had 18·18 per cent of moisture.

The time at which I applied the two superphosphates was in June during a time of prolonged drought. Later on, in July, and after rain had fallen, I repeated the trial and this time I found that *both* superphosphates showed injury for a time to the grass. I can only surmise that, in the first instance, the moister sample remained attached to the blades of grass while the drier one did not adhere but found its way down to the ground surface. When, however, later on, moister conditions prevailed, both samples behaved alike and caused a certain amount of injury, though only of a temporary nature. There is very little doubt, however, that the higher moisture was responsible for the bursting of the bags, and this should be guarded against.

2. *Basic Slag.*

Prices of this underwent a steady rise during the year. For 30 per cent. 47*s.*6*d.* per ton was quoted in January and increased to 60*s.* in November. For 35 per cent. the prices similarly ranged from 57*s.* 6*d.* to 67*s.* 6*d.*, and for 40 per cent. from 67*s.* 6*d.* to 75*s.* per ton.

As a rule, samples were found to be up to quality and well ground, but instances of variation came occasionally to my notice.

A.

	(1) per cent.	(2) per cent.
Total Phosphates	37·75	42·32
Fineness	81·3	82·06

B.

	(1) per cent.	(2) per cent.
Total Phosphates	19·64	26·44
Fineness	80	81·6

In the case of A the guarantee was for 40 per cent. The first sample showed a distinct deficiency, while the second sample, taken from another part of the delivery, was above the guarantee. On comparing the two samples I found a marked difference of colour between them.

In B the guarantee was 26 per cent. The first sample showed over 6 per cent. deficiency, but a further one was up to guarantee. Here again there was a marked difference of colour between the two samples.

3. *Ground Mineral Phosphates.*

These, more especially North African Phosphates, appear to have been used to a considerable extent and to have taken, in part, the place of Basic Slag, supplies of which have been somewhat short.

With these, however, the same variations of quality as noted in the case of Basic Slag have been at times found. A member who had made a considerable purchase of North African Phosphate under a guarantee of 62–63 per cent. of phosphates and 80 per cent. fineness, sent me a sample which was found to be 10 per cent. deficient in phosphates. He subsequently sent me samples from other lots forming part of the same contract, and the following table shows how considerably these varied.

	A. Per cent.	B. Per cent.	C. Per cent.	D. Per cent.
Total Phosphates	52·1	55·85	54·23	56·7
Fineness	80·6	83·6	80·6	83·6

Solubility of Mineral Phosphates.

It had become a practice with some vendors of ground mineral phosphates, or materials very similar to these, to state a guarantee of the solubility of the phosphates according to a method different from that specified under the Fertilisers and Feeding Stuffs Act (2 per cent. citric acid solution). By varying the quantity of the material used, the strength of the solution and the time occupied, a much higher solubility was shown than would have been the case with the ordinary method.

In one instance that came to my notice a guarantee of 95 per cent. solubility in citric acid solution was given, whereas when tested by the ordinary method the solubility was found to be only 30 per cent.

Such a practice is, to say the least, misleading, and gives an unfair comparison with Basic Slag and other phosphates. As a result, however, of attention being drawn to this, I am happy to say that the practice has now been discontinued.

4. *Nitrate of Soda and Sulphate of Ammonia.*

Nitrate of Soda and Sulphate of Ammonia continue to be the principal purely nitrogenous manures employed on the farm, and the use of the dry, granular and neutral Sulphate of Ammonia appears to have been much extended. Cyanamide and other nitrogenous manures produced from atmospheric sources have, so far, had but a limited use in this country.

The price of Nitrate of Soda was £13 per ton at the beginning of the year, gradually lessening to £12 12*s*. 6*d*., while Sulphate of Ammonia, commencing at £14 14*s*. per ton, fell, in June, to £12 5*s*. and has since continued at about £12 7*s*. to £12 10*s*. per ton.

5. *Lime, Limestones, etc.*

	A.		B.	C.
	As guaranteed. Per cent.	As found. Per cent.	Per cent.	Per cent.
Lime	92·14	60·01	50·17	35·21
Oxide of Iron and Alumina	2·66	2·39	2·37	4·95
Silica	·55	2·19	5·94	24·75
Moisture, Carbonic Acid, etc.	4·65	35·41	41·52	31·09
	100·00	100·00	100·00	100·00

A. The differences between the two analyses are in great measure accounted for by the fact that the sample had taken up water and become hydrated. The purchase was one of 50 tons, the price being 36*s*. 6*d*. per ton, delivered. After receipt of my report the vendors made the purchaser an allowance of 10*s*. per ton, or £25 in all. This came from Lincolnshire.

B and C. These were two limestones which came from Oxfordshire. It will be noted that B was much the better of the two for agricultural purposes.

6. *Sewage Manure.*

	In natural state.	In dried state.
Moisture	82·55	—
[1] Organic matter	9·45	54·15
[2] Phosphoric Acid	·57	3·25
Lime	1·76	10·09
Oxide of Iron and Alumina	1·45	8·34
Carbonic Acid, etc.	1·77	10·14
Insoluble Siliceous matter	2·45	14·03
	100·00	100·00
[1] Containing Nitrogen	·71	4·07
Equal to Ammonia	·86	4·95
[2] Equal to Phosphate of Lime	1·24	7·10

This material—which cost 4*s.* to 4*s.* 6*d.* per ton, on the land—was distinctly better than most of its kind, and was quite worth getting for use on land of light, chalky character such as that in question, and which was liable to " burn " and to be deficient in organic matter.

7. *Soil.*

A sample of soil sent me gave the following results :—

(Soil dried at 100° C.)

Organic matter and loss on heating	5·63
Oxide of Iron	·30
Alumina	·19
Lime	·10
Magnesia	·13
Potash	·16
Soda	·01
Phosphoric Acid	·02
Sulphuric Acid, etc.	·01
Insoluble Siliceous Matter	93·45
	100·00
Nitrogen	·112

This was, to a depth of about 7 in., a light, peaty, and gritty soil with a sandy subsoil.

The analysis shows it to be extremely poor. It was acid in character and almost destitute of lime, other necessary constituents of fertility being present also in but small amount. I was not surprised to hear that this soil was unsatisfactory for crop growing, and I question, indeed, whether it would " pay " for the application of lime.

The following is a list of the samples sent by Members during the twelve months, Dec. 1, 1924, to Nov. 30, 1925 :—

Linseed Cake	8
Cotton Cake and Meal	11
Compound Feeding Cakes and Meals	33
Soya Bean Meal	1
Groundnut Cake	3
Cereals, Offals, etc.	35
Superphosphate	6
Compound Manures	17
Raw and Steamed Bones	14
Meat Meal	2
Meat and Bone Meal	7
Fish Meal	7
Basic Slag	21
Slag Phosphate	1
North African Phosphate	10
Sulphate of Ammonia	6
Soot	1
Potash Materials	8
Shoddy	36
Dried Blood	2
Hoofs and Horns	3
Lime, Chalk, etc.	14
Milk, Butter, etc.	22
Water	26
Soil	17
Miscellaneous	30
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ANNUAL REPORT FOR 1925 OF THE BOTANIST.

THE information available now shows that the cereal crops of 1925 were satisfactory on the whole. But the unusual number of reports of failures amongst autumn-sown crops leads to the suspicion that a larger acreage than usual had to be abandoned. The adverse climatic conditions beginning at the time of autumn sowing and continuing until late in the spring handicapped wheat and winter oats considerably especially on the heavier types of soil. Possibly as the direct outcome of a long spell of indifferent growing conditions, the incidence of fungoid diseases on these two crops was somewhat unusual. The ordinary pests put in their usual appearance but the losses they gave rise to were not abnormal. Some of the less well-known pests were, however, more abundant than usual. The most noteworthy of these was "Take-All"—that being the well-known Australian name for the disease described as " White-heads " or " Night-Blindness " by growers here who have had the misfortune to find it attacking their wheat crops. The presence of the disease in this country has been recorded from time to time in this *Journal*, but in view of its comparative rarity, the symptoms have not been adequately described. The name " White-heads " sums them up fairly accurately. There is nothing to indicate that a crop has been attacked until the ripening period begins. The infected ears then take on a characteristic bleached appearance and the straw tends to break at soil level. At first sight the damage in a badly infected crop might well be ascribed to sheep getting into it and breaking down straws in all directions. These bleached ears set little or no grain. In a dry season they remain white until harvested, but in 1925 most of those examined had become blackened by the growth of moulds on the dead tissues. At the bases of diseased plants small black patches with the fruits of the fungus *Ophiobolus cariceti* were found. The life-history of the fungus has been worked out in great detail in America, and it has been shown that when infected stubble is ploughed in the spores and mycelium can remain in a living condition for years in the soil. No curative measures have been discovered, and as no sorts of wheat escape its attacks, the disease cannot be dodged by growing resistant sorts. There is some evidence to show that well-grown crops suffer more than others, but as it is the good grower who usually notices diseases most and inquires about them, this may not prove to be the case when fuller knowledge is available.

So far the most serious damage has been caused to crops in Essex, Lincolnshire, and Cambridgeshire. No estimate of the actual losses is possible owing to the inadequacy of the data on the subject. But that they can be serious is shown by the fact that on one field on a Lincolnshire farm the yield of grain was only four hundredweight per acre whilst that of uninfected fields on the same farm was some twenty hundredweights. From Essex came two reports of crops reduced to one half the normal. Such losses are not uncommon in Australia and America. There is, however, no reason for assuming that they are likely to become general in this country. Our systems of rotation safeguard the crop to a great extent and go far towards ensuring starving the fungus out of the soil, whereas where wheat is grown continuously every opportunity is given it to increase. Nevertheless it is unwise to be too optimistic about controlling the disease easily.

A second somewhat uncommon disease appeared in the spring oat crop. This was due to attacks of Helminthosporium, which in several cases were so severe that at the end of May the failure of the crops seemed certain. Unexpectedly good recoveries were made, however, and no serious losses were recorded. The disease appears to have been more or less confined to the Abundance oat and as it can be carried by the seed, there is a strong probability that this useful oat will again be attacked in 1926.

An uncommon and unimportant disease of mangolds was sent in from Norfolk late in the season. The veins running through the leafstalks were discoloured and the centre of the root, after becoming mucilaginous, had dried out. The spongy remains had been utilized for shelter by earwigs which were found in dozens when the roots were sliced across for examination.

Fewer potato diseases were reported on than usual, cases of leaf-curl and mosaic being the only representatives of the large group of pests attacking this crop. Judging from the specimens sent, the leaf-curl was in one instance a particularly severe attack for the lower part of the haulm had shed its foliage. An inquiry brought the expected reply that the "seed" was homegrown and that the crop from which it had been saved was a light one, in turn derived from homegrown seed. It is a particularly poor form of economy to save seed from a crop showing even slight signs of curl or of any virus disease. Unless it is certain that a crop is thoroughly healthy no seed should ever be saved from it, for as infected plants produce small tubers, picking such for seed may well mean directly selecting an infected seed supply.

The unusually virulent outbreak of apple and pear scab which occurred in 1924 was not followed by an exceptionally severe attack in 1925, as seemed probable, and although there was a plentiful stock of dead leaves and infected twigs bearing the fungus the losses from scab do not appear to have been greater than usual. The same seems to have been true of the disease known as chocolate-spot in beans. The epidemic of the previous year was not repeated and though many opportunities for observation were available, not a single badly-infected crop was seen. Many crops in fact were completely free from the disease.

A considerable percentage of the plants sent in for identification again consisted of grasses. One batch of specimens was unusual, for it represented more or less completely the flora of a mountain sheep walk in Radnorshire. The different species comprising it were of unquestionable value under these special conditions, but it was interesting to note that none of them were grasses ordinarily used in the formation of permanent grass land. Various forms of *Agrostis alba*, or Fiorin, were sent in from time to time. The wide range of conditions under which they were found is of interest, as it indicates that this little-used species might be relied upon to help form a permanent turf where many other "agricultural" grasses would fail. It comprised a peaty soil lightly shaded by pines, a very light sandy soil, hillsides in the Lake country, light arable land in Bedfordshire where the grass had become a nuisance, boulder clay and a silt soil near the mouth of the Humber. Its prevalence in the last-mentioned district was known from a report received in 1924 which showed that the greater part of the flora of silt land newly sown with grass seeds consisted of this species. Little is known with regard to its feeding value, and the grass is usually classed as a weed, perhaps too arbitrarily.

Apart from grasses, the usual supply of weeds was received for identification. None of the specimens sent in were of any particular interest. One unusual plant was the thorn apple. isolated specimens of which occur mysteriously from time to time. Its large spiny fruits and distinctive habit of growth make it a striking plant. A second was the rest-harrow, a very common pasture weed in some parts of the country, which nevertheless is rarely included in the year's lists. When well established it ruins grazing almost as effectively as hawthorn. Its early eradication by stocking out or repeatedly cutting over is always advisable. In view of the fact that chickweed is not known to be a poisonous plant it is worth recording that it was again suggested on two occasions to be the cause of the loss of sheep folded on turnips.

Many reports indicate that the comparatively simple prescriptions given in the leaflet dealing with the laying down of land to grass, which was issued two seasons ago by the Society, have produced good results. But questions regarding the management of newly-sown grassland show that some partial failures have occurred, where they were most to be expected, on the heavier soils. Information on the treatment of fields in which the plant was over thin and an excess of weeds present, was required on six occasions. It is difficult to say what is the best course to follow under such circumstances. The ideal is to start again, but the cost of ploughing out, working up a tilth, and reseeding is prohibitive. The only alternatives appear to be to try to strengthen the existing turf by scratching up the surface with harrows in the early autumn and broadcasting a few pounds of seed, or to apply a dressing of basic slag in the hopes that what grass there is will spread by means of runners through the resulting mats of white clover. The latter is undoubtedly the better plan where ample dressings of slag were not used at the time of sowing.

The most troublesome weed has proved to be the creeping thistle. The conditions provided for the germination of the grass seed suited it well and where this weed was present in the soil it has made the most of its opportunity. The plants should have been pulled during the first season of their growth. This, though often a formidable-looking piece of work, can be done rapidly and effectively. Where this precaution was not taken the plants have become well established and by now they possess a well-developed system of underground stems. Repeated cutting of the tops will be necessary to check their further development and ultimately exhaust the underground runners.

Seed testing during 1925 provided no features of special interest. The number of samples examined was again small, and approximately the same as that of the previous year, the numbers being 76 in 1925 and 82 in 1924. The majority of these were homegrown and so provided an indication that the guarantees under which farm seeds are now sold are considered a sufficient safeguard. The samples stated to be purchased, eight in number, gave on analysis figures for germinating capacity and purity agreeing with those guaranteed by the vendors. The greater part of the homegrown samples were cereals, the germination of which was good with the exception of two samples of black winter oats. One homegrown sample of Harrison's Glory pea was unsatisfactory. Judged by appearance, it was suitable for sowing, but on testing only 70 per cent. of the seeds germinated and the growth was so tardy and many of the seedling roots were so obviously feeble that it seemed certain that under the less favourable conditions of the open field a far smaller percentage would produce plants. The suggestion was, therefore, made that the bulk should not be used for seed.

Questions regarding the choice of varieties of farm crops for special purposes have been almost confined to the suitability for winter sowing of certain oats and barleys. The oat inquiries were prompted by failures during the winter of 1924–5, whilst those on barley were due to the fact that the autumn sowings produced a profitable and, in some cases, exceptionally profitable, crop. Owing to the early establishment of the barley it felt the bad effects of the dry summer less than the spring-sown crop, and its early ripening provided an opportunity for harvesting it safely before the weather broke. In consequence, the autumn-sown seems to have been generally distinctly better than the crop sown at the normal time and in a year when much of the crop was under-average in quality and difficult to market it sold well. Those now tempted to autumn sow on the large scale should remember though that little is known about the winter hardiness of the two-row barley or indeed of the six-row barley generally recommended for the purpose. Of the two-row forms, that is the only forms which realize good malting prices, Archer's is probably the hardiest and the most likely to survive a long spell of adverse conditions. But the fact that this form has been cultivated in this country for a very long time, and that it has only recently found favour for autumn sowing, leads to the suspicion that it may not prove as hardy as it is often considered to be, and that a hard winter might wipe out the crop.

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ANNUAL REPORT FOR 1925 OF THE ZOOLOGIST.

INTRODUCTION.

WITH the exception of slugs and snails, which were everywhere unusually destructive, no pests were notified as being especially prevalent during the past season, and it was remarkable how few complaints were received of the insects injurious to cereals. There were, however, a number of cases of special interest if of no outstanding importance. The notes which follow deal with these cases and indicate the general scope of the work of the Department during 1925.

FARM AND GARDEN CROPS.

Slugs and Snails.—The outstanding pests of the year in this section have been slugs and snails. Every kind of plant has suffered from their attacks, and though this is annually the case to some extent, their abundance during the past year was quite unusual, and in some localities they were trapped and destroyed in large numbers with scarcely any effect on the plague.

Against slugs on plants of the cabbage tribe and on dwarf beans Mr. W. H. Lawrence has been using with good success an alum wash—1 lb. alum and ½-lb. burnt lime to five gallons of water—applied with an ordinary watering-can. He gives two applications in the evening with an hour's interval—say, at 7 p.m. and 8 p.m.

Cabbage Caterpillars.—The Cabbage Butterfly ("Large White," *Pieris brassicae*) is a local pest, and its attacks may be severe in some districts, while it is practically absent in others. In the neighbourhood of Cambridge it was especially abundant in 1924. In the autumn of that year large numbers of the chrysalids were collected, and most of them proved to be "ichneumon stung," and were presently surrounded by clusters of the pale-yellow ichneumon cocoons popularly supposed to be "caterpillar's eggs." These parasites had so effectively destroyed the brood that cabbage butterflies were absolutely rare in this district in 1925, and though, as I have said, this does not hold for the whole country, a similar phenomenon seems to have been observed in several other districts.

The "Small White" butterfly (*P. napi*) was as abundant as usual, and its habit of laying its eggs singly on the leaves while its caterpillar soon goes for the heart of the plant, make it difficult to control. It is much earlier than the Large White, and was doing harm at the beginning of July. Later in that month a particularly destructive attack by yet another caterpillar was observed in certain plots of brassica plants, and these proved to be the larvæ of the "Garden Pearl" moth, *Pionea forficalis*. This moth, belonging to the little-studied group of Pyralidæ, has often been recorded from cabbage plants, but it appears to be greatly on the increase in some districts, and cases were observed where the destruction wrought by it exceeded that of all the other cabbage caterpillars, the leaves of the plant being quite skeletonized. The caterpillars of this moth go into the earth to pupate, and their cocoons are covered with particles of soil. The moths come out in August and September, and are attracted by light. Mr. Theobald records having captured as many as twenty on a single night early in September by means of a light trap.

A New Capsid Bug.—Almost simultaneously dwarf beans near Cambridge and potatoes near Reading were observed to be attacked by an insect not long known to be present in England, and certainly not hitherto recorded as injurious in this country. This was a small Capsid bug, scientifically known as *Halticus saltator*. It is perhaps hardly likely to prove a serious pest, but its sudden appearance deserves to be noted. At a glance it would certainly be taken for one of the "flea-beetles," for it is a small black insect with great powers of leaping, as its scientific name implies. Further examination, however, shows it to be one of the bugs (Hemiptera) with the typical sucking mouth-parts, and the leaves are not devoured but are caused to shrivel from loss of sap, just as in the case of aphis or frog-hopper attack. In the Cambridge instance dwarf beans were noticed to be failing in July, and the injury was found to be chiefly due to these bugs, though some other species of Capsids were present. Rather later they appeared in some numbers on runner beans, which also suffered to some extent, but it was remarkable that a thorough search of the garden revealed a plentiful supply of the bugs on phlox plants, which, however, showed no signs of injury.

A careful investigation of neighbouring gardens and allotments failed to yield a single specimen of the bug, and its sudden appearance at an isolated spot remains unexplained.

The Pea Leaf-miner.—In July I received some specimens of pea plants with the leaves almost entirely destroyed, and the closest examination revealed nothing as to the cause of the trouble. It was only on receiving a third consignment of specimens that the pest at work was found to be the leaf-mining maggot of a fly—*Phytomyza pisi*. At an earlier stage of the attack the nature of the injury would have been manifest, for the mining maggots feed on the interior of the leaf, leaving the upper and lower skins intact, causing "blisters," but here the lower epidermis had entirely perished, so that the wounds had the appearance of having been excavated by some external feeder working on the under-side of the leaf.

Small and insignificant attacks of the pea leaf-miner are not uncommon, but it is clear that this pest is capable of working much havoc if unchecked.

Cockchafers.—A particularly bad attack by cockchafer grubs was notified from the neighbourhood of the New Forest, the roots of all manner of plants being destroyed. Of our three common English chafers, this is the most local in distribution and the most dependent on the neighbourhood of woodland, and it is indeed more of a forest than an agricultural pest, the grubs eating the roots of seedlings in the nurseries, while the beetles defoliate the trees—preferably the oak and elm. The smaller summer chafer, which is often mistaken for it, is much more widely spread and of different habits, its grubs preferring grass roots, while the beetles are far less destructive to foliage. The still smaller garden chafer is most noticed as a leaf-eater of all kinds of garden trees, and it is not very often that the harm its grubs certainly inflict on plant roots is brought home to it. It is natural, therefore, that bad attacks on farm crops by cockchafer grubs should almost always be in the close neighbourhood of woodland.

None of the numerous measures which have been tried against this pest in the larval condition have had much success—except the obvious plan of turning the grubs up for the birds by frequent cultivation. The best results have always been obtained by fighting the insect in the beetle stage. In this country its life-history extends over four years, and in districts where it abounds it is generally noticed to be particularly abundant every fourth year. These "flight years" are utilised on the Continent to make special raids on the beetles as they cling to the leaves of the trees on the outskirts of woods in May or June. On hot, bright days they are very sluggish, and, when beaten down by poles, are easily collected before they fly away. Incredible numbers of cockchafers are thus destroyed—emptied by the sackful into cauldrons of boiling water—in the forest regions of Germany. Many years ago Taschenberg recorded some startling statistics. For example, in one season in the neighbourhood of Leipzig the bag amounted to nearly eight thousand bushels of the beetles, estimated to comprise more than 378 million individuals.

Mangold-fly.—This pest, always present more or less, was the subject of frequent complaints during the past season. The fly, *Pegomyia betæ*, lays its eggs in May and June on the underside of the leaves of mangold and beet, and the grubs which hatch out are leaf-miners—feeding on the interior of the leaves, which are blistered and ultimately destroyed. It will attack sugar beet, but seems very much to prefer the mangold plant, and this suggests that a ring of mangolds might be of use as trap-plants round a crop of sugar beet in districts where beet is found to suffer greatly from the fly.

At an early stage of the attack a paraffin emulsion spray has been found useful in preventing the flies from laying their eggs, and a top dressing of nitrate of soda, if there is likelihood of rain, will help to force on the crop to a less vulnerable stage. With older plants there is little to be done except to remove and destroy as far as is practicable the blistered and rotting leaves, and so prevent the maggots and " fly cases " they contain from giving rise to flies to do further harm.

Other Pests.—Other insects concerning which advice was asked in this section were turnip-fly, black aphis on beans, celery-fly—of which there were severe attacks somewhat late in the season—and white-fly (*Aleurodes*), both in the open and under glass. Of these there is nothing of special interest to report.

FRUIT PESTS.

Cherry Fruit-fly.—This insect, at present happily not found in our orchards, aroused more interest among fruit growers than any of our indigenous pests during the past season, for two reasons. It was found that early cherries imported from the continent were so infested with maggots as to disgust buyers of that fruit and interfere with the sale of perfectly sound home-grown cherries when they came on the market. In the second place there was a very natural fear lest so disastrous a pest should, by constant importation, obtain a footing in our own fruit gardens.

Flies of the genus *Rhagoletis* have for a long time been troublesome in the United States on various kinds of fruit, and for several years past *R. cerasi* has become established in numerous localities on the Continent, and a large proportion of the cherries annually imported into this country prove to be attacked. This was notably the case during the past season, and gave rise to much anxiety.

As regards the falling off in the demand for British cherries, buyers may be assured that home-grown fruit is *at present* sure to be free from the maggots, and may be purchased with confidence. It is impossible, however, in most cases, to know where the cherries have been grown, and it is quite likely that imported cherries are sometimes sold as the product of our own orchards.

The question of the possibility of the pest establishing itself here is even more important. The case stands thus : Infested cherries show little external sign of injury, but on being opened, are found to contain a maggot. On these being detected, the rest of the sample will most likely be thrown on the nearest rubbish heap, or by the wayside. The grubs will leave the discarded cherries and will presently become flies, ready to attack any cherry trees in the neighbourhood in the following season. Some comfort is derived from the fact that though for several years past infested cherries have been constantly imported, the fly has not hitherto been able to establish itself. This *may* be because of unsuitability of climatic conditions, and one hopes that it is so, but the insect is already established on the continent in places where the climate differs very little from our own, and it is very unsafe to conclude that it cannot flourish here. Most of the imported cherries are consumed in the towns, where, if the flies survive, there are no cherry trees for them to operate on, but it is always possible that maggoty cherries thrown by the wayside—say from a motor-car—should give rise in due course to flies which would find themselves in more favourable circumstances. In any case there would seem to be considerable grounds for urging some restriction on the importation of infested fruit.

Plum Saw-fly.—This pest, of which I have received no complaints for some years, was very troublesome in certain districts during the past season. The saw-fly, *Hoplocampa fulvicornis*, lays its egg in the calyx of the blossom, and the "caterpillar" bores into the developing fruit, destroying the kernel, and causing the infested fruit to fall at a very immature stage—half an inch to an inch in length. A single grub will attack more than one plum, so that, even on the tree, some of the injured plums will show a small exit hole, but have no caterpillar inside. In any case, the caterpillar leaves the fallen fruit to enter the soil to turn to a chrysalis.

It seems important to collect at once and destroy the prematurely fallen plums—and by jarring the branches, some of the injured fruit still on the tree may be shaken down. The winter is passed by the caterpillar in the earth, where it surrounds itself with a cocoon, and waits until the following spring to pupate. It may be possible, therefore, in some cases, to prevent the appearance of next year's saw-flies by suitable treatment of the ground beneath the trees.

Big-bud in Black Currants.—Two years ago I called the attention of Members to Sir George Watt's suggestion that the Black Currant Gall-mite might be combated by firing the bushes during the winter. So far I have been unable to persuade any fruit-grower to test the method on a fairly large scale, but two small experiments are now being carried out in different parts of the country, and it is hoped that something may be learnt from them. One should be especially instructive since, simultaneously with the burning of one plot, another plot was re-stocked in the usual manner, and as time goes on it will be possible to compare the yield year by year in the two cases. Of course neither plot produced anything in the past season, and all that can be reported is that the plants which had been fired have made extraordinary growth. The results next season will be looked forward to with interest. Meanwhile Mr. Goude's plan of obtaining mite-free from infested plants by taking " green " cuttings is being widely practised. It will be remembered that the method is to take the new shoots in May, before the mite has entered the new buds, and to wash them in order to kill wandering mites before striking them in a frame. They grow vigorously, and by September are strong enough to be transplanted.

Other Fruit Pests.—There were inquiries with regard to several other insect pests of fruit about which there is nothing of special interest to report. They include woolly aphis ; the small ermine moth ; Capsid bugs on apples ; raspberry beetle (especially destructive on cultivated blackberries) ; and various kinds of " red spider."

FOREST PESTS.

Larch Insects.—The larch " case-worm "—*Coleophora laricella*—was among the forest pests inquired about, and of course the larch-bug, *Chermes laricis*, was abundant in many districts. Spraying as a remedy for larch-bug is hardly a practical proposition in forestry, and is seldom resorted to, cultural measures, such as judicious thinning and the admission of light and air, being generally relied on to counteract the pest. There is no reason, however, why spraying should not be practised in the treatment of trees on a smaller scale, and the use of a paraffin emulsion was recommended, and was entirely successful, in a case reported from Herefordshire in May last. At the end of July Mr. Harley wrote : " Since spraying the young larch trees the *Chermes* has practically entirely disappeared. The bark of the trees is now clean and no longer scaly as it was in the spring, and all the trees have grown well. This time last year we could hardly see the trees for the bug."

Poplar Bud-moth.—My attention was called in June to poplar trees which were evidently being seriously attacked by some insect. Examination proved the cause of the trouble to be a minute moth, *Gypsonoma aceriana*, of which I had never previously received complaints. The work of this moth is characteristic and easy to recognise from the curious little hollow brown cylinders, much like aborted catkins, in the axils of the leaves where the caterpillar has been feeding. The moth lays its eggs in the summer under the leaves, on which the caterpillars feed for a time, but in the autumn they bore into the shoot at the base of the leaf, and the tunnel they make is produced externally into the hollow cylinder above mentioned, which is made of silk covered by the caterpillar's excrement, and is about half an inch long. Such shoots as recover from the injury shew a gall-like swelling and a conspicuous scar where the wound has healed over, but many are killed outright.

Very few caterpillars were still to be found in the shoots when my attention was called to the matter; nearly all had left to turn to chrysalids and moths. Severe pruning early in June, so as to prevent the emerging of the new brood of moths, might be beneficial.

Populus alba was the species concerned, but all varieties of poplar are subject to this pest.

MISCELLANEOUS PESTS.

Wood Borers.—Furniture beetles are often the subject of inquiry in this department, the " death watch " beetle, *Anobium domesticum*, being usually the pest in question. The most interesting case reported in 1925 concerned the large wood borer, *Xestobium tessellatum*, notorious for its ravages in public buildings such as Westminster Hall. It is a great plague in churches —indeed the late Dr. David Sharp used to call it the sacrilegious beetle.

In March last a correspondent wrote to say that a certain church in the Midlands had formerly harboured a large number of bats, but that these had been cleared out a few years ago. Soon after their removal evidences of beetle attack began to be observed, the floor in certain parts of the church being littered with " sawdust " and dead beetles, and the pest was clearly on the increase.

No one, as far as I can ascertain, has previously suggested any relation between bats and beetle attack, but on consideration of the matter it seems entirely probable that these animals would be useful in checking the rapid spread of the infestation. The grubs boring in the timber would, of course, be beyond their reach, but the beetles crawling or flying to new places of attack would no doubt be devoured. I communicated the circumstances to the late Prof. Maxwell Lefroy, who had made a special study of these insects. He wrote: " I have never had any case of the kind; there is no evidence of any connection between bats and beetles; it is certainly extremely interesting. Personally I should recommend the people to reinstall the bats ! "

I am told that a few bats have now reappeared in the church and are to remain undisturbed.

Wasps.—A correspondent sent in April last a number of wasps for identification and especially for verification of the fact that they were all queens. Rewards had been offered for the capture of wasps during the winter, and some 2,000 specimens had been collected. Those sent were queens of the species *Vespa vulgaris*—one of two species nearly equally common in this country. The sender kindly promised to inform me of the results, if any, of this extraordinary slaughter of queen wasps—if all were queens—in a particular district in reducing the summer wasp plague, but the report is not yet to hand. As is well known, the only members of the wasp community to survive the winter are the queens, and as the summer approaches each makes the nucleus of a nest and has to rear without assistance the first batch of grubs, feeding them on insects in all but the earliest stage of their life. In about a month these have developed into worker wasps, and henceforward all the building and feeding operations are undertaken by them and their successors, the queen having nothing further to do but to lay eggs in the cells which they provide. It follows that each hibernating wasp is the potential foundress of a nest, and, where these insects are too numerous, the destruction of any examples found during the winter is very desirable. The *extermination* of wasps is, however, by no means to be desired, for in the course of rearing their young they kill incredible numbers of insects, many of them, such as the crane-fly, among our agricultural pests.

Animal Parasites.—Inquiries often reach this department which are more appropriate to the Department of Veterinary Science, and among such in 1925 were questions about pig-lice, and demodicic mange in dogs. An application of an unusual nature had reference to a plague of mosquitoes, to combat which it was proposed to undertake large and costly operations in connection with a lake on the estate. This was not recommended, as it appeared to be unnecessary and of very doubtful utility. The mosquitoes which infest houses are generally bred close at hand—in tanks, water butts, cess-pools, etc., and not in a lake some distance away. The clearance of brush from the borders of the lake was advised, but it was recommended that special attention should be directed to breeding places in the immediate neighbourhood of the buildings. The use of mosquito traps in the garden was also advocated. The insects resort in the daytime to cool and dark retreats, and traps based on this habit are exceedingly effective.

CECIL WARBURTON.

Schools of Agriculture,
Cambridge.

Royal Agricultural Society of England.

(Established May 9th, 1838, *as the* English Agricultural Society, *and incorporated by Royal Charter on March 26th,* 1840.)

Patron.

HIS MOST GRACIOUS MAJESTY THE KING.

President for 1926.

LORD DESBOROUGH, G.C.V.O.

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Year when first elected on Council.	
1919	H.R.H. The Prince of Wales, K.G., *York House, S.W.*1.
1922	H.R.H. The Duke of York, K.G., *White Lodge, Richmond Park.*
1905	Adeane, Charles, C.B., *Babraham Hall, Cambridge.*
1895	Bedford, Duke of, K.G., *Woburn Abbey, Bedfordshire.*
1893	Cornwallis, Col. F. S. W., *Linton Park, Maidstone, Kent.*
1885	Coventry, Earl of, *Croome Court, Severn Stoke, Worcestershire.*
1887	Crutchley, Percy, *Sunninghill Lodge, Ascot, Berkshire.*
1898	Devonshire, Duke of, K.G., *Chatsworth, Bakewell, Derbyshire.*
1904	Greenall, Sir Gilbert, Bart., C.V.O., *Walton Hall, Warrington.*
1899	Northbrook, Earl of, *Stratton, Micheldever, Hampshire.*
1881	Parker, Hon. Cecil T., *The Grove, Corsham, Wiltshire.*
1891	Stanyforth, Lt.-Col. E. W., C.B., *Kirk Hammerton Hall, York.*

Vice-Presidents.

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1908	Derby, Earl of, K.G., *Knowsley, Prescot, Lancashire.*
1924	Desborough, Lord, G.C.V.O., *Taplow Court, Buckinghamshire*
1900	Greaves, R. M., *Wern, Portmadoc, North Wales.*
1910	Harlech, Lord, *Brogyntyn, Oswestry, Shropshire.*
1903	Harrison, William, *Albion Iron Works, Leigh, Lancashire.*
1904	Mathews, Ernest, C.V.O., LL.D., *Elmodesham House, Amersham.*
1915	Portland, Duke of, K.G., *Welbeck Abbey, Worksop, Notts.*
1914	Powis, Earl of, *Powis Castle, Welshpool, Mont.*
1909	Hazlerigg, Sir Arthur G., Bart., *Noseley Hall, Leicester.*
1905	Richmond and Gordon, Duke of, K.G., *Goodwood, Chichester.*
1907	Yarborough, Earl of, *Brocklesby Park, Habrough, Lincolnshire.*

Ordinary Members of the Council.

1922	Alexander, Hubert, *The Croft, Sully, near Cardiff (Glamorgan).*
1923	Ashton, T. W., *Estate Office, Hursley Park, Winchester (Hampshire).*
1905	Aveling, Thomas L., *Pettings Court, Wrotham (Kent).*
1925	Barbour, Major Robert, *Bolesworth, Tattenhall (Cheshire).*
1924	Barton, Bertram H., *Straffan House, Straffan, Co. Kildare (Ireland).*
1911	Behrens, Major Clive, *Swinton Grange, Malton (Yorks, N. Riding).*
1922	Bell, John, *The Hall, Thirsk (Nottinghamshire).*
1921	Bledisloe, Lord, K.B.E., *Lydney Park (Gloucestershire).*
1922	Brocklebank, Rev. C. H., *Bartlow House, near Cambridge (Cambridgeshire).*
1906	Brocklehurst, Henry Dent, *Sudeley Castle, Winchcombe (Glos.).*
1910	Brown, Davis, *Marham Hall, King's Lynn (Norfolk).*
1918	Burke, U. Roland, *Chatsworth, Bakewell (Derbyshire).*
1923	Burkitt, William, *Grange Hill, Bishop Auckland (Durham).*
1921	Burrell, Sir Merrik R., Bart., *Knepp Castle, Horsham (Sussex).*
1905	Carr, Richardson, *Mill Lawn, Burley, Brockenhurst, Hants. (Hertfordshire).*
1919	Combes, Daniel, *Dinton Manor, Salisbury (Wiltshire).*
1924	Cotterell, Sir John R. G., Bart., *Garnons, Hereford (Herefordshire).*
1921	Courthope, Col. Sir G. L., Bart., M.C., M.P., *Whiligh (Sussex).*
1917	Curre, Col. Edward, *Itton Court, Chepstow (Monmouthshire).*
1921	Davies, David, M.P., *Plas Dinam, Llandinam (North Wales).*
1923	Dickie, Robert, *Knockenjig, Sanquhar (Scotland).*
1923	Disbrowe-Wise, Lt.-Col. H. E. D., C.B.E., *Walton Hall, Burton-on-Trent (Derbyshire).*
1913	Evens, John, *Burton, near Lincoln (Lincolnshire).*
1905	Falconer, James, *Northbrook Farm, Micheldever Station (Hampshire).*
1921	Fenwick, E. Guy, *North Luffenham Hall, Stamford (Rutland).*

Ordinary Members of the Council (*continued*).

Year when first elected on Council	
1906	Fitzwalter, Lord, *Goodnestone, Canterbury (Kent).*
1924	*Garrett, Col. Frank, C.B.E., *Aldringham House, nr. Leiston, Suffolk.*
1922	Gates, B. J., *Wing Park, Leighton Buzzard (Buckinghamshire).*
1916	Gilbey, Sir Walter, Bart., *Elsenham Hall, Elsenham (Essex).*
1921	Groom, Hubert, *Northgate House, Warham, Wells (Norfolk).*
1925	Greenwell, Sir Bernard E., Bart., *Marden Park, Woldingham (Surrey).*
1925	Hale, Windham E., *Mowbreck Hall, Kirkham (Lancashire).*
1925	Hall, J. Herbert, *Hill House, Mobberley, Knutsford (Cheshire).*
1905	Harris, Joseph, *Brackenburgh Tower, Carlisle (Cumberland).*
1905	Hiscock, Arthur, *Manor France Farm, Blandford (Dorset).*
1919	Hobbs, Robert, *Kelmscott, Lechlade, Glos. (Oxfordshire).*
1923	Howkins, Benjamin, *Bromham, Bedford (Bedfordshire).*
1923	Johnstone, Capt. G. H., *Trewithen, Grampound Road (Cornwall).*
1912	Lane-Fox, Col. Rt. Hon. G. R., M.P., *Bramham Park, Boston Spa (Yorks, W. Riding).*
1918	Llewelyn, Col. C. Venables, *Llysdinam, Newbridge-on-Wye (South Wales).*
1909	Luddington, J. L., *Wallington Hall, King's Lynn (Cambridgeshire).*
1909	Mansell, Alfred, *College Hill, Shrewsbury (Shropshire).*
1922	Matthews, Frank P., *27 Cavendish Square, W.1 (London).*
1904	Middleton, Christopher, *Vane Terrace, Darlington (Durham).*
1922	Mildmay of Flete, Lord, *Flete, Ermington S.O. (Devon).*
1922	Miln, G. P., *Abbot's Lodge, Chester (Cheshire).*
1916	Mount, Sir William A., Bart., C.B.E., *Wasing Place, Reading (Berkshire).*
1911	Myatt, John, *Lincoln House, Shenstone, Lichfield (Staffordshire).*
1922	Neilson, R. B., *Holmwood, Sandiway (Cheshire).*
1922	Newton, Sir Douglas, K.B.E., M.P., *Croxton Park, St. Neots (Huntingdonshire).*
1915	Oliver-Bellasis, Capt. R., *Shilton House, Coventry (Warwickshire).*
1910	Overman, Henry, *Weasenham, King's Lynn (Norfolk).*
1925	Paget, Leopold C., *Middlethorpe Hall, York (Yorks, W. Riding).*
1909	Patterson, R. G., *Acton Hill, Stafford (Staffordshire).*
1912	Perkin, A. W., *Greenford Green, Harrow (Middlesex).*
1925	Piper, James, *The Grange, Burntisland, Fife (Scotland).*
1921	Platt, Major Eric J. W., *Gorddinog, Llanfairfechan (North Wales).*
1916	Price, F. Hamlyn, *7 Harley Gardens, The Boltons, S.W.10 (London).*
1924	*Ransome, Edward C., *Highwood, Ipswich.*
1905	Rea, George Grey, *Doddington, Wooler R.S.O. (Northumberland).*
1923	Sample, C. H., *29 Grainger Street West, Newcastle-on-Tyne (Northumberland).*
1922	Sherwood, S. R., *Playford, Ipswich (Suffolk).*
1921	Silcock, T. B., *Arthfield House, Poulton-le-Fylde (Lancashire).*
1907	Smith, Fred, *Deben Haugh, Woodbridge (Suffolk).*
1921	*Somerville, Prof. W., M.A., D.Sc., *School of Rural Economy, Oxford.*
1912	Strachie, Lord, *Sutton Court, Pensford (Somerset).*
1923	Straker, Frederick, *Angerton Hall, Morpeth (Northumberland).*
1922	Strutt, Hon. Edward G., C. H., *Whitelands, Hatfield Peverel (Essex).*
1923	Tanner, E. Craig, *Eyton-on-Severn, Cross Houses (Shropshire).*
1920	Thornton, F. H., *Kingsthorpe Hall, Northampton (Northants).*
1907	Tindall, C. W., *Park House, Louth (Lincolnshire).*
1923	Tomkinson, Major C. W., *Willington Hall, Tarporley (Cheshire).*
1923	Twentyman, J. R., *Kirby Misperton Hall, Pickering (Yorks, N. Riding).*
1924	Wakefield, Jacob, *Sedgwick House, Kendal (Westmorland).*
1925	Weigall, Lt.-Col. Sir Archibald G., K.C.M.G., *Petwood, Woodhall Spa (London).*
1889	Wheeler, Col. E. Vincent V., *Newnham Court, Tenbury (Worcs.).*
1921	*Whetham, C. Dampier, M.A., F.R.S., *Upwater Lodge, Cambridge.*
1918	Wickham-Boynton, T. L., *Burton Agnes Hall (Yorks, E. Riding).*

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* Nominated Member of Council.

STANDING COMMITTEES.

⁂ Under Bye-Law 73, the President is a Member *ex officio* of all Committees, and the Trustees and Vice-Presidents are Members *ex officio* of all Standing Committees except the Committee of Selection and General Purposes.

The Honorary Director is a Member ex officio of all Committees.

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Courthope, Sir G. L.
Greenall, Sir Gilbert
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Burke, U. Roland
Carr, Richardson
Cornwallis, Col.
Crutchley, Percy
Greaves, R. M.
Harrison, W.
Mansell, Alfred
Mathews, Ernest
Wheeler, Col.

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Hazlerigg, Sir A. G.
Adeane, C.
Brocklebank, Rev. C. H.
Burkitt, W.
Coltman-Rogers, C.
Disbrowe-Wise, Lt.-Col.
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Mansell, Alfred
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Somerville, Prof.
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Greaves, R. M.
Middleton, C.
Neilson, R. B.
Oliver-Bellasis, Capt. R.
Patterson, R. G.
Sample, C. H.
Silcock, T. B.
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Gilbey, Sir Walter
McFadyean, Prof. Sir J.
Weigall, Sir A. G.
Ashton, T. W.
Behrens, Major Clive
Bell, John
Brown, Davis
Burke, U. Roland
Carr, Richardson
Crutchley, Percy
Disbrowe-Wise, Lt.-Col.
Fenwick, E. Guy
Gates, B. J.
Harris, Joseph
Mansell, Alfred
Mathews, Ernest
Overman, Henry
Silcock, T. B.
Smith, Fred
Stanyforth, Lt.-Col.
Straker, F.
Tanner, E. C.
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Burkitt, W.
Cornwallis, Col.
Evens, John
Greaves, R. M.
Hobbs, Robert
Luddington, J. L.
Mathews, Ernest
Miln, G. P.
Overman, Henry
Somerville, Prof. W.
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Behrens, Major Clive
Brocklebank, Rev. C. H.
Brown, Davis
Crutchley, Percy
Fenwick, E. Guy
Greaves, R. M.
Hobbs, Robert
Howkins, B.
Mansell, Alfred
Mathews, Ernest
Myatt, John
Neilson, R. B.
Overman, Henry
Paget, L. C.
Rea, G. G.
Sherwood, S. R.
Silcock, T. B.
Smith, Fred
Tanner, E. C.
Tindall, C. W.
Wickham-Boynton, T. L.
The Stewards of Live Stock

Judges Selection Committee.—*Same as Stock Prizes Committee.*

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Aveling, T. L.
Bell, John
Crutchley, Percy
Evens, John
Falconer, J
Garrett, Col.
Greaves, R. M.
Harrison, W.
Luddington, J. L.
Middleton, C.
Myatt, John
Overman, Henry
Patterson, R. G.
Ransome, E. C.
Sample, C. H.
Sherwood, S. R.
Wheeler, Col.
The Steward of Implements

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Burrell, Sir Merrik R.
Hazlerigg, Sir A. G.
Ashton, T. W.
Aveling, T. L.
Bell, John
Burke, U. Roland
Carr, Richardson
Crutchley, Percy
Harrison, W.
Neilson, R. B.
Overman, Henry
Paget, L. C.
Rea, G. G.
Sample, C. H.
Stanyforth, Lt.-Col.
Tindall, C. W.

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Parker, Hon. C. T.
Burrell, Sir Merrik R.
Weigall, Sir A. G.
Ashton, T. W.
Burkitt, W.
Carr, Richardson
Crutchley, Percy
Disbrowe-Wise, Lt.-Col.
Evens, John
Fenwick, E. Guy
Greaves, R. M.
Oliver-Bellasis, Capt. R.
Overman, Henry
Silcock, T. B.
Smith, Fred
Somerville, Prof.
Wheeler, Col.
Whetham, C. D.
Williams, Prof. R. Stenhouse

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Greenall, Sir G. (*Chairman*)
Hazlerigg, Sir A. G.

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The Whole Council, with the following representatives of the Local Committee :—

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Abram, Ald. Sir G. S.
Benyon, J. H.
Cox, Ald. F. A.
Cumber, W. J.
Palmer, Eric
Sutton, E. P. F.
Whitley, S. R.
Johnson, C. S. (*Hon. Local Sec.,*

Honorary Director.—Sir Gilbert Greenall, Bart., C.V.O.

Secretary.—T. B. Turner, 16 Bedford Square, W.C.1.

Editor of Journal—C. S. Orwin, M.A., *School of Rural Economy, Oxford.*
Consulting Chemist.—Dr. J. Augustus Voelcker, M.A., 1 *Tudor St., E.C.*4.
Consulting Veterinary Surgeon.—Prof. Sir John McFadyean, *Royal Veterinary College, Camden Town, N.W.*1.
Botanist.—Prof. Sir R. H. Biffen, F.R S., *School of Agriculture, Cambridge.*
Zoologist.—Cecil Warburton, M.A., *School of Agriculture, Cambridge.*
Consulting Engineer.—F. S. Courtney, 25 *Victoria Street, Westminster, S.W* 1.
Surveyor.—Charles H. R. Naylor, *Smith's Bank Chambers, Derby.*
Publisher.—John Murray, 50a *Albemarle Street, W.*1.
Solicitors.—Garrard, Wolfe, Gaze & Clarke, 13 *Suffolk Street, S.W.*1.
Bankers.— Westminster Bank, 1 *St. James's Square, London. S.W.*1.

DISTRIBUTION OF GOVERNORS AND MEMBERS OF THE SOCIETY, AND OF ORDINARY MEMBERS OF THE COUNCIL.

Electoral District	Division	Number of Governors and Members	Number of Ordinary Members of Council	Ordinary Members of Council
A.	Bedfordshire	128	1	B. Howkins.
	Cheshire	906	5	Major R. Barbour; J. H. Hall; G. P. Miln; R. B. Neilson; Major C. W. Tomkinson.
	Cornwall	108	1	Capt. G. H. Johnstone.
	Derbyshire	297	2	U. Roland Burke; Lt.-Col. H. E. D. Disbrowe-Wise.
	Dorset	115	1	Arthur Hiscock.
	Hampshire and Channel Islands	344	2	T. W. Ashton; J. Falconer.
	Hertfordshire	238	1	Richardson Carr.
	Lancashire and Isle of Man	529	2	Windham E. Hale; T. B. Silcock.
	Middlesex	100	1	A. W. Perkin.
	Monmouthshire	99	1	Col. Edward Curre.
	Norfolk	472	3	Davis Brown; Hubert Groom; Henry Overman.
	Northamptonshire	250	1	F. H. Thornton.
	Northumberland	526	3	G.G.Rea; C.H. Sample; F. Straker.
	Staffordshire	311	2	John Myatt; R. G. Patterson.
	Worcestershire	223	1	Col. E. V. V. Wheeler.
	Yorkshire, N.R.	299	2	Major Clive Behrens; J. R. Twentyman.
	Scotland	321	2	Robert Dickie; James Piper.
		—5,266	—32	
B.	Buckinghamshire	190	1	B. J. Gates.
	Devon	194	1	Lord Mildmay of Flete.
	Durham	302	2	W. Burkitt; C. Middleton.
	Essex	337	2	Sir Walter Gilbey; Hon. E.G.Strutt.
	Herefordshire	189	1	Sir John R. G. Cotterell.
	Leicestershire	277	1	Sir A. G. Hazlerigg.
	London	565	3	F. P. Matthews; F. Hamlyn Price; Lieut.-Col. Sir A. G. Weigall.
	Nottinghamshire	212	1	John Bell.
	Rutland	49	1	E. Guy Fenwick.
	Shropshire	457	2	Alfred Mansell; E. Craig Tanner.
	Suffolk	322	2	S. R. Sherwood; Fred Smith.
	Surrey	231	1	Sir Bernard E. Greenwell.
	Wiltshire	218	1	D. Combes.
	Yorkshire, W.R.	362	2	Col. Rt. Hon. G. R. Lane-Fox; Leopold C. Paget.
	South Wales	138	1	Col. C. Venables Llewelyn.
		—4,043	—22	
C.	Berkshire	209	1	Sir W. A. Mount.
	Cambridgeshire	298	2	Rev. C. H. Brocklebank; J. L. Luddington.
	Cumberland	191	1	Joseph Harris.
	Glamorgan	142	1	Hubert Alexander.
	Gloucestershire	333	2	Lord Bledisloe; H.D.Brocklehurst.
	Huntingdonshire	56	1	Sir Douglas Newton.
	Kent	447	2	T. L. Aveling; Lord Fitzwalter.
	Lincolnshire	431	2	John Evens; C. W. Tindall.
	Oxfordshire	206	1	Robert Hobbs.
	Somerset	198	1	Lord Strachie.
	Sussex	411	2	Sir Merrik R. Burrell; Col. Sir G. L. Courthope.
	Warwickshire	275	1	Capt. R. Oliver-Bellasis.
	Westmorland	99	1	Jacob Wakefield.
	Yorkshire, E.R.	163	1	T. L. Wickham-Boynton.
	Ireland	95	1	Bertram H. Barton.
	North Wales	417	2	David Davies; Major E. J. W. Platt.
		—3,971	—22	
Foreign Countries		257		*Col. Frank Garrett. *E. C. Ransome.
Members with no Addresses		36	4	*Prof. W. Somerville. *C. Dampier Whetham.
Grand Totals		13,573	80	

* Nominated Members of Council.

TABLE SHOWING THE NUMBER OF GOVERNORS AND MEMBERS IN EACH YEAR FROM THE ESTABLISHMENT OF THE SOCIETY.

Year ending with Show of	President of the Year	Governors		Members			Total
		Life	Annual	Life	Annual	Honorary	
1839	3rd Earl Spencer	—	—	—	—	—	1,100
1840	5th Duke of Richmond	86	139	146	2,434	5	2,860
1841	Mr. Philip Pusey	91	219	231	4,047	7	4,595
1842	Mr. Henry Handley	101	211	328	5,194	15	5,849
1843	4th Earl of Hardwicke	94	209	429	6,155	15	6,902
1844	3rd Earl Spencer	95	214	442	6,161	15	6,927
1845	5th Duke of Richmond	94	198	527	5,899	15	6,733
1846	1st Viscount Portman	92	201	554	6,105	19	6,971
1847	6th Earl of Egmont	91	195	607	5,478	20	6,391
1848	2nd Earl of Yarborough	93	186	648	5,387	21	6,335
1849	3rd Earl of Chichester	89	178	582	4,643	20	5,512
1850	4th Marquis of Downshire	90	169	627	4,356	19	5,261
1851	5th Duke of Richmond	91	162	674	4,175	19	5,121
1852	2nd Earl of Ducie	93	156	711	4,002	19	4,981
1853	2nd Lord Ashburton	90	147	739	3,928	19	4,923
1854	Mr. Philip Pusey	88	146	771	4,152	20	5,177
1855	Mr. William Miles, M.P.	89	141	795	3,838	19	4,882
1856	1st Viscount Portman	85	139	839	3,896	20	4,979
1857	Viscount Ossington	83	137	896	3,933	19	5,068
1858	6th Lord Berners	81	133	904	4,010	18	5,146
1859	7th Duke of Marlborough	78	130	927	4,008	18	5,161
1860	5th Lord Walsingham	72	119	927	4,047	18	5,183
1861	3rd Earl of Powis	84	90	1,113	3,328	18	4,633
1862	H.R.H. The Prince Consort 1st Viscount Portman	83	97	1,151	3,475	17	4,823
1863	Viscount Eversley	80	88	1,263	3,735	17	5,183
1864	2nd Lord Feversham	78	45	1,343	4,013	17	5,496
1865	Sir E. C. Kerrison, Bart., M.P.	79	81	1,386	4,190	16	5,752
1866	1st Lord Tredegar	79	84	1,395	4,049	15	5,622
1867	Mr. H. S. Thompson	77	82	1,328	3,903	15	5,465
1868	6th Duke of Richmond	75	74	1,409	3,888	15	5,461
1869	H.R.H. The Prince of Wales, K.G.	75	73	1,417	3,864	17	5,446
1870	7th Duke of Devonshire	74	74	1,511	3,764	15	5,436
1871	6th Lord Vernon	72	74	1,589	3,896	17	5,648
1872	Sir W. W. Wynn, Bart., M.P.	71	73	1,655	3,953	14	5,763
1873	2nd Earl Cathcart	74	62	1,832	3,936	12	5,916
1874	Mr. Edward Holland	76	58	1,944	3,756	12	5,846
1875	1st Viscount Bridport	79	79	2,058	3,918	11	8,145
1876	2nd Lord Chesham	83	78	2,164	4,013	11	6,349
1877	Lord Skelmersdale	81	76	2,239	4,073	17	6,486
1878	Col. Kingscote, C.B., M.P.	81	72	2,328	4,130	26	6,637
1879	H.R.H. The Prince of Wales, K.G.	81	72	2,453	4,700	26	7,332
1880	9th Duke of Bedford	83	70	2,673	5,083	20	7,929
1881	Mr. William Wells	85	69	2,765	5,041	19	7,979
1882	Mr. John Dent Dent	82	71	2,849	5,059	19	8,080
1883	6th Duke of Richmond and Gordon	78	71	2,979	4,952	19	8,099
1884	Sir Brandreth Gibbs	72	72	3,203	5,408	21	8,776
1885	Sir Massey Lopes, Bart., M.P.	71	69	3,356	5,619	20	9,135
1886	H.R.H. The Prince of Wales, K.G.	70	61	3,414	5,569	20	9,134
1887	Lord Egerton of Tatton	71	64	3,440	5,387	20	8,982
1888	Sir M. W. Ridley, Bart., M.P.	66	56	3,521	5,225	16	8,884
1889	HER MAJESTY QUEEN VICTORIA	73	58	3,567	7,153	15	10,866
1890	Lord Moreton	122	58	3,846	6,941	17	10,984
1891	2nd Earl of Ravensworth	117	60	3,811	6,921	19	10,928
1892	1st Earl of Feversham	111	69	3,784	7,066	20	11,050
1893	1st Duke of Westminster, K.G.	107	74	3,786	7,138	21	11,126
1894	8th Duke of Devonshire, K.G.	113	73	3,798	7,212	22	11,218
1895	Sir J. H. Thorold, Bart.	120	80	3,747	7,179	23	11,149
1896	Sir Walter Gilbey, Bart.	126	83	3,695	7,253	23	11,180
1897	H.R.H. The Duke of York, K.G.	126	83	3,705	7,285	24	11,223
1898	5th Earl Spencer, K.G.	121	79	3,687	7,182	25	11,094
1899	Earl of Coventry	116	75	3,656	7,009	23	10,879
1900	H.R.H. The Prince of Wales, K.G.	111	71	3,628	6,832	24	10,666
1901	3rd Earl Cawdor	102	70	3,564	6,338	27	10,033
1902	H.R.H. Prince Christian, K.G.	100	69	3,500	5,955	26	9,650
1903	H.R.H. The Prince of Wales, K.G.	99	62	3,439	5,771	27	9,398
1904	16th Earl of Derby, K.G.	96	68	3,375	5,906	32	9,477
1905	9th Lord Middleton	89	78	3,212	5,758	33	9,170
1906	Mr. F. S. W. Cornwallis	94	155	3,132	6,189	30	9,600
1907	4th Earl of Yarborough	91	174	3,076	6,299	29	9,669
1908	9th Duke of Devonshire	89	178	3,019	6,442	30	9,758
1909	7th Earl of Jersey, G.C.B.	91	177	2,951	6,696	31	9,946
1910	Sir Gilbert Greenall, Bart.	86	166	2,878	6,934	31	10,095
1911	HIS MAJESTY KING GEORGE V.	85	168	2,805	7,191	30	10,279
1912	9th Lord Middleton	85	170	2,741	7,283	30	10,309
1913	Earl of Northbrook	89	168	2,691	7,474	26	10,448
1914	4th Earl of Powis	89	173	2,626	7,629	28	10,545
1915	Duke of Portland, K.G.	88	184	2,517	7,313	28	10,130
1916	7th Duke of Richmond and Gordon, K.G.	88	185	2,427	7,526	27	10,248
1917	Mr. Charles Adeane, C.B.	93	210	2,412	8,214	26	10,955
1918	Hon. Cecil T. Parker	102	224	2,395	8,226	25	10,972
1919	Sir J. B. Bowen-Jones, Bart.	119	236	2,411	8,558	24	11,348
1920	H.R.H. The Prince of Wales, K.G.	129	256	2,402	9,208	25	12,020
1921	Mr. R. M. Greaves	137	275	2,374	10,098	24	12,908
1922	H.R.H. The Duke of York, K.G.	144	287	2,317	10,596	22	13,366
1923	Lt.-Col. E. W. Stanyforth	153	293	2,262	10,778	20	13,506
1924	Mr. Ernest Mathews, C.V.O.	159	289	2,201	10,676	21	13,346
1925	Sir Gilbert Greenall, Bart., C.V.O.	158	291	2,160	10,949	15	13,573

STATEMENT made to the Council by the Chairman of the Finance Committee, on presenting the Accounts for the year 1925.

Mr. Adeane said that last year they brought forward a balance of £3,874 and received an income of £19,840, making the total receipts £23,714. The payments, including the investment of £5,155 and of £3,500 which was not required to meet any loss on the show, amounted to £20,070, leaving a balance of £3,644. The balance was greater than expected, as the £2,000 voted for the Research Committee was not drawn. Subscriptions, which amounted to £12,085, constituted a record. The only point to remark in the balance-sheet was that the capital of the society showed an increase of £5,458 during the year, in spite of a depreciation in investments amounting to £3,627 (mainly owing to the fall in Conversion Loan of 2½ points), as compared with their market value on December 31, 1924. The reserve fund now stood at £121,406.

Estimates.—Unfortunately the number of new members was not coming up to the average, and they had thought it wise to estimate accordingly, reducing the figure from £12,085—the actual amount received last year—to £11,600 for 1926. On the other hand, interest on investments would show an increase of £832 over the previous year. They estimated that the receipts for 1926 would amount to £18,785. With regard to expenditure, under the head of Salaries of Staff there was an increase of £739—an increase necessitated by the office reorganisation. The other items of expenditure remained about the same, with the exception of Scientific Research, for which they were estimating a charge of £2,000. The total expenditure was estimated at £16,683, giving an estimated credit balance of £2,102.

In conclusion, Mr. Adeane said he would like to refer for a moment to the slackening off in the admission of new members. He was glad to be able to say that Lord Desborough, their President, had consented to send out a letter to likely subscribers in the counties round Reading, and he was sure it would have a beneficial result.

The detailed estimate of receipts and expenditure for the current year was as follows —

FORECAST OF ORDINARY RECEIPTS AND EXPENDITURE FOR 1926.

(Other than in respect of the Show.)

Prepared by direction of the Finance Committee on the basis of the recommendation of September 21, 1905, made by the Special Committee.

Actual figures for 1925.		Estimate for 1926.
£	*Receipts.*	£
12,085	Subscriptions of Governors and Members	11,600
417	Interest on Daily Balances	400
4,702	Interest on Investments	5,534
257	Sales of Journals, Text Books, Pamphlets, etc.	280
192	Advertisements in Journal	200
88	Income Tax Repaid	511
385	*Miscellaneous*	—
183	N.D.D. Entry Fees, etc.	180
72	Hire of Council and Committee Rooms	80
32	*Sugar-Beet Lifter Trials—Entry Fees*	—
18,413		18,785
£	*Expenditure.*	£
3,169	Salaries of Secretary and Official Staff	3,908
270	Pensions to Officials	302
881	Rent, Lighting, Cleaning, Wages, etc. (say)	900
659	Printing and Stationery	800
301	Postages and Telegrams	300
215	Miscellaneous	215
2,063	Journal	2,000
420	Chemical Department	425
250	Botanical Department	205
200	Zoological Department	200
400	Veterinary Department	400
100	Grant to Research Institute, University College, Reading	100
100	Consulting Engineer	100
276	Examinations for National Diplomas (R.A.S.E. Share)	275
3,500	Amount set aside towards loss on Shows	3,500
12,804		13,675
	Exceptional Expenditure.	
£		£
	Scientific Research	2,000
110	Repairs to Society's Furniture	160
51	Library Binding and Purchase of Books	150
526	Legal Charges and Auditors' Fees (say)	650
	Alterations to Office	50
101	Trials of Sugar Beet Lifters	—
58	Certificates and Medals for Long Service and Skilled Labour	58
13,650		16,683
	Surplus :—	
£		£
4,763	Estimated Receipts	18,785
—	Estimated Expenditure	16,683
	Estimated Receipts over Expenditure	£2,102

STATEMENT OF RECEIPTS AND EXPENDI-
JULY 7 TO

Corresponding figures for 1924. £	Receipts.	£	s.	d.	£	s.	d.
2,000	Subscription from the City of Chester				2,000	0	0
2,028	Prizes given by Agricultural and Breed Societies and others .	2,626	1	0			
1,601	Prizes given by Chester Local Committee (excluding £300 given for Dog Section)	1,684	0	0			
3,629					4,310	1	0
—	Contributions to Show Fund				13	11	0
	FEES FOR ENTRY OF IMPLEMENTS :—						
10,165	Implement Exhibitors' payments for Shedding	9,826	2	0			
263	Non-Members' Fees for entry of Implements	176	0	0			
111	Fees for entry of "New Implements"	90	0	0			
10,539					10,092	2	0
	FEES FOR ENTRY OF LIVE STOCK :—						
20	3 Members' Entries @ 5*l*.	15	0	0			
4,983	2,038 Members' Entries @ 3*l*.	6,114	0	0			
6	2 Members' Entries @ 2*l*.	4	0	0			
2,250	1,582 Members' Entries @ 30*s*.	2,373	0	0			
416	394 Members' Entries @ 1*l*.	394	0	0			
40	55 Members' Entries @ 15*s*.	41	5	0			
28	65 Members' Entries @ 10*s*.	32	10	0			
25	87 Members' Entries @ 5*s*.	21	15	0			
13	Entrance fees	95	4	0			
600	105 Non-Members' Entries @ 6*l*.	630	0	0			
225	59 Non-Members' Entries @ 3*l*.	177	0	0			
16	5 Non-Members' Entries @ 2*l*.	10	0	0			
—	1 Non-Members' Entry @ 30*s*.	1	10	0			
11	27 Non-Members' Entries @ 1*l*.	27	0	0			
3	4 Non-Members' Entries @ 10*s*.	2	0	0			
8,636					9,938	4	0
	FEES FOR ENTRY OF POULTRY :—						
155	Members :—472 Entries @ 5*s*.	118	0	0			
269	Non-Members :—494 Entries @ 10*s*.	247	0	0			
6	Entrance fee	1	0	0			
430					366	0	0
	OTHER ENTRY FEES :—						
108	Produce	228	0	0			
172	Horse-jumping Competitions	121	0	0			
21	Plantations Competition	49	13	6			
38	Orchards and Fruit Plantations Competition	16	0	0			
339					414	13	6
	CATALOGUE :—						
19	Extra lines for particulars of Implement exhibits . .	18	7	0			
7	Woodcuts of "New Implements"	4	10	0			
1,088	Advertising in Catalogue	1,075	8	3			
34	Sales of Implement Section of Catalogue	33	7	11			
1,112	Sales of Combined Catalogue	1,496	17	4			
49	Sales of Jumping Programme	64	2	6			
2,309		2,692	13	0			
86	*Less* Selling Expenses in Showyard	65	19	4			
2,223					2,626	13	8
£27,796	Carried forward . . .				£29,761	5	2

TURE OF THE SHOW AT CHESTER,

JULY 11, 1925.

Expenditure.

Corresponding figures for 1924.		£	s.	d.	£	s.	d.
£	**COST OF ERECTION OF SHOWYARD :—**						
2,972	Transferring Society's permanent buildings from Leicester to Chester (including taking down and re-erecting)	3,124	5	7			
1,415	Fencing round Showyard	1,746	4	8			
2,777	Implement Shedding	2,674	4	2			
8,490	Stock Shedding	8,287	15	0			
490	Poultry and Produce Sheds	633	16	4			
112	*Experimental Wool Shed*	—	—	—			
562	Dairy	650	1	4			
119	Fodder Shed and Office	133	16	8			
241	Education and Forestry	208	6	11			
1,056	Grand Stands and Large Ring	1,113	3	9			
968	Various Offices and Stands	1,059	3	6			
822	Painting Signs and Fixing Ditto, Fencing and Judging Rings	727	0	3			
81	Insurance	82	18	10			
65	Ironmongery	49	19	7			
4,115	Hire of Canvas	3,899	10	8			
2,229	General Labour and Horse Hire (including Society's Clerk of Works)	2,358	11	8			
47	Bee Shed	47	18	8			
41	Extra Entrance to Show	42	5	0			
—	Clean Milk Demonstration	31	14	0			
106	Horse-Shoeing Shed	93	7	6			
26,708		26,964	4	1			
40	Less 80 Flagpoles @ 10*s.*	40	0	0			
					26,924	4	1
26,668							
	SURVEYOR :—						
553	Salary, £500 ; Travelling Expenses to London, etc., £26 6*s.* 6*d.* Clerk, £10 10*s.* ; Petty Expenses, £10 19*s.*				547	15	6
	PRINTING :—						
785	Printing of Prize Sheets, Entry Forms, Admission Orders, Circulars to Exhibitors, Prize Cards, Tickets and Miscellaneous	734	6	11			
36	Programmes for Members	52	16	9			
12	Plans of Showyard	1	0	0			
1,294	Printing of Catalogues	1,242	4	3			
326	Binding of Catalogues	342	12	5			
38	Carriage of Catalogues	52	18	6			
74	Printing Awards	68	16	3			
24	Programmes of Jumping Competitions	22	17	6			
					2,517	12	7
2,589							
	ADVERTISING :—						
163	Advertising Closing of Entries in Newspapers	309	11	5			
415	Advertising Show in Newspapers	643	0	9			
524	Billposting	680	18	6			
133	Printing of Posters and Labels	209	7	0			
21	Press Pamphlet	12	10	0			
					1,855	7	8
1,256							
	POSTAGE, CARRIAGE, &c. :—						
157	General Postage	189	13	9			
69	Postage of Badges to Members	70	12	3			
12	Carriage of Luggage	14	19	4			
					275	5	4
238							
	AMOUNT OF PRIZES AWARDED,						
12,308	(including 4,310*l.* 1*s.* given by various Societies and Chester Local Committee)				13,804	11	0
	COST OF FORAGE FOR LIVE STOCK :—						
1,802	Hay, 580*l.* 8*s.* ; Straw, 1,367*l.* 15*s.* 9*d.* ; Green Food, 468*l.* 5*s.* 7*d.*				2,416	9	
	JUDGES' AND ASSISTANT JUDGES' FEES AND EXPENSES :—						
643	Judges and Assistant Judges of : Miscellaneous Implements, 9*l.* 16*s.* ; Horses, 74*l.* 17*s.* 2*d.* ; Cattle, 220*l.* 19*s.* 9*d.* ; Sheep, 207*l.* 3*s.* 10*d.* ; Pigs, 115*l.* 12*s.* 8*d.* ; Poultry, 35*l.* 5*s.* 2*d.* ; Produce, 45*l.* 19*s.* 7*d.* ; Goats, 15*l.* 17*s.* 4*d.* ; Luncheons, 84*l.* 10*s.*				810	1	6
65	Badges for Judges and other officials				83	3	6
110	Rosettes				107	19	2
£46,232	Carried forward				£49,842	9	8

STATEMENT OF RECEIPTS AND EXPENDITURE

Corresponding figures for 1924. £	Receipts (contd.).	£	s.	d.	£	s.	d.
27,796	Brought forward				29,761	5	2
	MISCELLANEOUS RECEIPTS:—						
780	Admission to Horticultural Show	1,190	6	8			
632	Garage	1,580	8	6			
204	Rent for Railway Offices	222	0	0			
75	Premium for Cloak Rooms	75	0	0			
130	Rent for Ministry of Agriculture Pavilion	243	5	0			
210	Advertisements in Stock Prize Sheet	332	12	4			
—	Sale of Manure	25	0	0			
21	*Band Enclosure*	—	—	—			
23	Miscellaneous	24	11	5			
10	Bath Chairs	20	19	6			
					3,714	3	5
2,085							
	ADMISSIONS TO SHOWYARD:—						
1,128	Tuesday, July 7, @ 10*s.*	1,664	19	6			
3,985	Wednesday, July 8, @ 5*s.* and 3*s.*	4,902	11	2			
4,554	Thursday, July 9, @ 3*s.*	6,270	14	4			
2,197	Friday, July 10, @ 3*s.*	3,056	11	5			
1,557	Saturday, July 11, @ 2*s.*	1,441	3	9			
221	Season Tickets	577	10	0			
740	Day Tickets	1,540	7	4			
					19,453	17	6
14,382							
	ENTRANCES TO HORSE RING:—						
408	Wednesday, July 8	476	7	0			
441	Thursday, July 9	484	7	6			
202	Friday, July 10	292	2	0			
102	Saturday, July 11	214	4	0			
611	Tickets sold for Reserved Enclosure	781	3	0			
					2,248	3	6
1,764							
	SALES:—						
177	Sales of Produce at Dairy				193	6	5
611	Auction Sales in Showyard (Fees, less Commission)				392	6	6
1,972	*Dog Show*;—Entry fees, 1,304*l.* 4*s.*; Admissions to Show, 744*l.* 9*s.* 9*d.*; Sales of Catalogues, 85*l.* 9*s.* 9*d.*; Advertisements in Schedule, 30*l.* 12*s.*; Guarantees to Prizes, 97*l.* 4*s.* 9*d.*; Stand Rent, 2*l.* 5*s.*; Deposits forfeited, 5*l.*; Contribution to Prizes from Chester Local Committee, 300*l.*; Special Contribution, 80*l.*; Miscellaneous Receipts, 1*l.* 16*s.* 9*d.*				2,651	2	0
5,976	*Debit Balance*				—	—	—
£54,763					£58,414	4	6

OF THE SHOW AT CHESTER (*continued*).

Corresponding figures for 1924.	Expenditure (*contd.*).	£	s.	d.	£	s.	d.
£46,232	Brought forward				49,342	9	8
	GENERAL ADMINISTRATION :—						
161	*Stewards* :—Personal and Railway Expenses	177	5	7			
241	*Assistant Stewards* :—Personal and Railway Expenses	306	15	7			
523	*Official Staff* :—Extra Clerks, 282*l.* 10*s.* 7*d.*; Lodgings, 75*l.* 10*s.*: Maintenance of Clerks, 66*l.* 10*s.*; Travelling Expenses, 28*l.* 11*s.* 5*d.*; Secretary's Hotel and Travelling Expenses, 146*l.* 10*s.* 2*d.*	599	12	2			
249	*Finance Office* :—Finance Clerk, 10*l.* 17*s.*; Grand Stand Men, 91*l.* 16*s.* 4*d.*; Turnstile Men, 52*l.*; Bank Clerks, 65*l.* 15*s.*; Hire of Car, 18*l.*; Refreshments, 11*l.* 15*s.* 11*d.*	250	4	3			
45	*Awards Office* :—Clerks, 45*l.* 10*s.* 5*d.*; Boys, 23*l.* 15*s.*	69	5	5			
1,219					1,403	3	0
	General Management :—						
184	Foremen and Assistant Foremen	192	9	8			
78	Yardmen	82	5	9			
172	Door and Gate Keepers	168	7	10			
152	*Garage* :—Superintendent and Assistants' Expenses, and Offices	157	0	10			
114	*Veterinary Department* :—Veterinary Inspectors	120	13	3			
126	*Engineering Department* :—Consulting Engineer and Assistant, 60*l.* 18*s.*; House, Maintenance and Travelling Expenses, 36*l.* 3*s.* 1*d.*	97	1	1			
1,012	*Police* :—Metropolitan Police, 1,125*l.* 19*s.* 4*d.*; Commissionaires, 25*l.*; Refreshments, 8*l.* 6*s.* 6*d.*	1,159	5	10			
1,838					1,977	4	3
872	*Dairy* :—Staff, 240*l.* 9*s.*; Milk, 219*l.* 9*s.*; Ice, 27*l.* 5*s.*; Utensils, 173*l.* 4*s.* 5*d.*; Salt, 1*l.* 12*s.*; Engine, 12*l.* 8*s.* 8*d.*; Butter Tests, 30*l.* 1*s.*; Carriage, 7*l.* 11*s.* 1*d.*; Lodgings 16*l.* 2*s.*; Labour, 34*l.* 12*s.* 11*d.*; Milk Analysis, 16*l.* 16*s.*; Butter and Cheese Boxes, 10*l.* 19*s.* 3*d.*; Refreshments, 27*l.* 2*s.* 4*d.*; Fuel, 5*l.* 0*s.* 1*d.*; Miscellaneous, 24*l.* 12*s.* 9*d.*	847	5	6			
9	Analysis of Cider	7	0	0			
112	*Poultry* :—Penning and Feeding, 54*l.* 10*s.*; Carriage, 17*l.* 13*s.* 6*d.*; Miscellaneous, 4*l.* 6*s.* 2*d.*	76	9	8			
993					930	15	2
713	*Horticultural Show* :—Hire of Tents, 435*l.* 2*s.* 6*d.*; Judges, 18*l.* 13*s.* 4*d.*; Wages, 62*l.* 10*s.*; Medals, 46*l.* 6*s.* 8*d.*; Labour, 41*l.* 0*s.* 10*d.*; Carriage and Cartage, 14*l.* 7*s.* 7*d.*; Miscellaneous, 30*l.* 19*s.* 4*d.*				649	0	3
	(For Admissions see Miscellaneous Receipts.)						
68	Plantations Competition				118	2	1
52	Orchards and Fruit Plantations Competition				54	10	2
2,376	*Dog Show* :—Prizes, 1,391*l.* 6*s.*; Erection of Show and Canvas, 418*l.* 6*s.* 10*d.*; Miscellaneous Printing, 65*l.* 13*s.* 6*d.*; Catalogue Printing, 118*l.* 13*s.* 5*d.*; Wages, 85*l.* 10*s.*; Judges, 32*l.* 7*s.* 7*d.*; Judges' Luncheons, 32*l.* 10*s.*; Hire of Tent, 48*l.*; Show Licence, 22*l.* 10*s.*; Advertising, 13*l.* 14*s.* 6*d.*; Postage, 22*l.* 1*s.* 6*d.*; Lodgings, 5*l.* 12*s.* 6*d.*; Miscellaneous, 15*l.* 11*s.* 4*d.*				2,271	17	2
	GENERAL SHOWYARD EXPENSES :—						
260	Band	318	7	5			
300	Hire of Furniture	376	10	0			
50	Telephone Extension	13	17	0			
8	Telegraph Facilities	11	16	10			
85	Official Luncheons	60	0	0			
50	St. John Ambulance	65	0	0			
10	Billposting in Showyard	22	10	0			
13	Medals	10	2	0			
70	Engraving Cups	34	6	6			
58	Plans and Maps	44	11	10			
—	Ashes	7	3	0			
42	Education and Forestry	80	7	6			
20	Tan	12	14	6			
3	Sleepers	50	9	3			
8	Hire of Tents	13	10	0			
20	Carriage—Sundry Items	3	0	5			
8	Hire of Weighbridge	15	10	0			
18	Bath Chairs	22	10	0			
66	Miscellaneous	148	0	4			
—	Gas	9	1	7			
1,089					1,319	8	2
150	*Hire of Land for Garage*				—	—	—
33	Outstanding accounts from Leicester Show				3	0	0
					58,069	9	11
—	Credit Balance				344	14	7
£54,763					£58,414	4	6

Receipts.

Figures for 1924. £		£ s. d.	£ s. d.	£ s.
	CASH AT BANKERS AND IN HAND AT JANUARY 1, 1925 :—			
133	Reserve Fund		673 17 2	
3,080	Current Account		3,083 1 1	
156	Cash in Hand		116 14 11	3,873 13
3,369				
	ANNUAL SUBSCRIPTIONS :—			
1,454	*Governors* for 1925	1,515 5 0		
10,214	*Members'* Subscriptions for 1925	10,409 16 7		
97	Subscriptions for previous years	129 8 0		
	LIFE GOVERNORS AND MEMBERS :—			
44	Annual Contributions	30 11 0	12,085 0 7	
11,809				
	MISCELLANEOUS :—			
5,058	Interest on Investments	4,702 6 11		
279	Interest on Daily Balances	416 13 0		
503	Income Tax repaid	88 2 6		
75	Sales of Pamphlets, Farm Account Books, etc.	48 13 0		
3	Sales of Library Catalogues	1 15 0		
109	Sales of Text Books	126 16 3		
94	Sales of Journals	79 10 6		
214	Advertisements in Journal	191 14 1		
217	N.D.D.: Entry Fees and Sales of Papers	183 6 11		
—	Sundries	385 9 1		
28	Hire of Council and Committee rooms	72 9 0		
—	Sugar Beet Lifter Trials—Entry Fees	31 10 0	6,328 6 8	
6,580				
18,389	Total of Ordinary Receipts			18,413 6 1
930	Life Compositions of Governors and Members		958 0 0	
50	Donations to Society's Funds		102 10 0	
63	Subscriptions for 1926		163 18 0	
494	Cash received for debts due at Dec. 31, 1924		202 18 10	1,427 6 1
1,537				
	Rent, 12 Hanover Square	255 15 0		
	Less Rent paid	255 15 0		
£23,295				£23,714 6 10

T. B. TURNER, *Secretary.*

DELOITTE, PLENDER, GRIFFITHS & CO., *Accountants.*

Payments.

Figures for 1924. £		£ s. d.	£ s. d.	£ s. d.
	GENERAL ADMINISTRATION :—			
3,246	Salaries of Secretary and Official Staff (including clerical assistance)	3,169 9 0		
312	Pensions to Officials	269 13 1		
1,182	Legal Charges and Auditors' Fees	525 11 9		
1,010	Rent, Rates, Taxes, Insurance and House Expenses	881 3 2		
9	*Purchase of Books*	—		
720	Printing and Stationery	659 3 9		
252	Postage and Telegrams	300 19 6		
32	Carriage of Parcels and Travelling Expenses	15 4 3		
141	Advertising and Miscellaneous Office Expenses	189 13 3		
6,904	JOURNAL OF THE SOCIETY :—		6,010 17 9	
	Balance cost of Volume 85 :—			
1,140	Printing and Binding	1,338 4 10		
324	Postage	332 14 2		
298	Editing and Literary Contributions	330 12 0		
2	Illustrations	61 9 10		
1,764			2,063 0 10	
9	On account of printing Volume 86		—	
24	Advertising and Binding Farm Account Books		9 12 6	
	LABORATORY :—			
418	Salary and Petty Cash		420 3 3	
	OTHER SCIENTIFIC DEPARTMENTS :—			
250	Botanist's Salary	250 0 0		
200	Zoologist's Salary	200 0 0		
100	Consulting Engineer	100 0 0		
400	Grant to Royal Veterinary College	400 0 0		
100	Grant to Research Institute, Reading	100 0 0		
3	*Medals for Proficiency in Cattle Pathology*	—		
1,053	NATIONAL DIPLOMA IN AGRICULTURE :—		1,050 0 0	
334	Honoraria and Expenses of Examiners	345 15 0		
81	Travelling Expenses of Officials	95 8 9		
80	Hotel Expenses of Examiners and Officials	85 3 2		
47	Printing, Stationery and Postage	66 13 4		
22	Writing Diplomas	16 1 9		
9	Hire of Premises	6 16 6		
75	Salary for Assistant	75 0 0		
648		690 18 6		
516	*Less* Entry Fees and Sales of Examination Papers	575 0 6		
132		115 18 0		
66	*Less* Highland and Agricultural Society's Moiety	57 18 0		
66			58 0 0	
	NATIONAL DIPLOMA IN DAIRYING :—			
46	Hire of Premises, etc.	55 7 4		
84	Fees and Travelling Expenses of Examiners	99 2 10		
38	Hotel and Travelling Expenses	41 4 4		
11	Printing and Postage	22 4 4		
179	(For Entry Fees, and Sales of Exam. Papers, see contra.)		217 18 10	
	EXTRA EXPENDITURE :—			
2,000	*Grant to Research Fund*	—		
29	Library: Binding and Purchase of Books	51 4 4		
191	*Painting and Cleaning Council Chamber*	—		
56	*Leaflets to Members*	—		
—	Repairs to Furniture	109 10 0		
—	Certificates and Medals for Long Service	57 17 0		
—	Sugar Beet Lifter Trials, Expenses and Prizes	101 8 9		
2,276			320 0 1	
3,500	Amount set aside towards Loss on Shows		3,500 0 0	
16,193	Total of Ordinary Payments			13,649 13 3
2,500	Purchase of £6,794 8*s*. 6*d*. 3½ per cent. Conversion Loan at 75⅞		5,155 5 5	
329	Payments to Willesden District Council		567 12 0	
399	*Net amount transferred from Reserve Fund to Show account to meet loss on Leicester Show*		—	
—	Purchase of Steel Cupboard		11 2 6	
—	Additions to Show Plant		489 2 3	
—	Amount due from Show Account		3 17 7	
—	Amount due and transferred to Gilbey Bequest Account		193 4 8	
—	Owing to Sundry Creditor at December 31, 1924		0 10 0	
3,228				6,420 14 0
	BALANCES AT THE BANK AND IN HAND :—			
674	Reserve Fund		146 11 6	
3,083	Current Account		3,305 9 3	
117	Cash in Hand		191 18 10	
3,874				3,643 19 7
£23,295				£23,714 6 10

Examined, audited, and found correct, this 23rd day of February, 1926.

JONAS M. WEBB,
HUBERT J. GREENWOOD, } *Auditors on behalf of the Society.*

ROYAL AGRICULTURAL

BALANCE SHEET,

Dr.

Figures for 1924. £		£	s.	d.	£	s.	d.	£	s.
	To SUNDRY CREDITORS—								
268	Sundry Creditors				73	0	0		
63	Subscriptions received in 1925 but belonging to 1926 .				163	18	0		
98	*Show receipts received in* 1924 *but belonging to* 1925 .				—				
								236	18
429									
	To CAPITAL :—								
125,173	As at December 31, 1924				128,342	1	5		
	SHOW FUND—								
(loss)5,976	Surplus on Chester Show				344	14	7		
3,500	Contribution from Ordinary Account . . .				3,500	0	0		
750	*Less Income Tax on Show surpluses.*				—				
121,947					132,186	16	0		
1,241	*Amount transferred from Timber Account.*				—				
930	Life Compositions received in 1925				958	0	0		
50	Donations towards the Society's Funds . . .				102	10	0		
68	Subscriptions for 1925 received in 1924 . . .				62	16	0		
2,196	Excess of ordinary receipts over payments for the year 1925				4,763	13	7		
126,432					138,073	15	7		
(Add)2,528	Depreciation on Investments				3,627	3	3		
128,960					134,446	12	4		
	DEPRECIATION written off, viz :—								
12	Fixtures	11	4	3					
44	Furniture	39	14	4					
7	Machinery	6	3	2					
455	Show Plant . . .	489	12	2					
100	Lease of 16 Bedford Square .	100	0	0					
					646	13	11		
618								133,799	18
128,342									
£128,771								£134,036	16

T. B. TURNER, *Secretary.*

DELOITTE, PLENDER, GRIFFITHS & CO., *Accountants.*

DECEMBER 31, 1925. *Cr.*

Figures for 1924. £		£	s.	d.	£	s.	d.
	By RESERVE FUND—						
104,651	146,465*l.* 13*s.* 7*d.* Conversion Loan 3½ per cent. (1961) @ 75¼*	110,215	8	6			
500	500*l.* War Savings' Certificates	500	0	0			
2,576	3,909*l.* 16*s.* Local Loans 3 per cent. (1912) @ 63⅜*	2,477	16	8			
2,301	2,840*l.* 13*s.* 6*d.* Metropolitan 3 per cent. Consolidated Stock (1941) @ 80*	2,272	10	9			
6,006	6,528*l.* 1*s.* 6*d.* Canadian 4 per cent. Stock (1940–1960) @ 91*	5,940	11	0			
	* Market value at 31 Dec. 1925.				121,406	6	11
116,034							
	By LEASE OF 16 BEDFORD SQUARE	1,200	0	0			
1,200	*Less* Amount written off	100	0	0			
					1,100	0	0
	By FIXTURES—						
	Value at December 31, 1924	149	10	9			
	Less Depreciation at 7½ per cent.	11	4	3			
		138	6	6			
149	Added during year	11	2	6			
					149	9	0
	By FURNITURE—						
	Value at December 31, 1924	397	3	1			
397	*Less* Depreciation at 10 per cent.	39	14	4			
					357	8	9
1,571	By PICTURES (500*l.*) and BOOKS (1,071*l.* 4*s.* 10*d.*)				1,571	4	10
	By MACHINERY—						
	Value at December 31, 1924	61	14	5			
62	*Less* Depreciation at 10 per cent.	6	3	2			
					55	11	3
	By SHOW PLANT—						
	Value at December 31, 1924	4,896	1	6			
	Less Depreciation at 10 per cent.	489	12	2			
		4,406	9	4			
4,896	Added during 1925	489	2	3			
					4,895	11	7
—	By Expenditure (less receipts) on Reading Show				58	18	11
489	By SUNDRY DEBTORS				830	12	1
—	By MEDALS				22	14	10
	By CASH AT BANKERS AND IN HAND—						
	ORDINARY ACCOUNT—						
674	Reserve Fund	146	11	6			
3,083	Current Account	3,305	9	3			
117	Cash in Hand	191	18	10			
3,874		3,643	19	7			
99	*SHOW ACCOUNT*—(Overdrawn)	55	1	4			
3,973					3,588	18	3
£128,771					£134,036	16	5

Examined, audited, and found correct, this 23rd day of February, 1926.

JONAS M. WEBB,
HUBERT J. GREENWOOD, } *Auditors on behalf of the Society.*

Royal Agricultural Society of England.

RESEARCH COMMITTEE.

RECEIPTS AND PAYMENTS FOR YEAR 1925.

RECEIPTS.	£	s.	d.
To Cash at Bank, Jan. 1st, 1925	1,745	7	6
,, Balance of Grant to National Institute of Agricultural Botany for Spring Oats Trials . .	296	14	5
,, Balance of Grant to East Suffolk County Council for Silage Experiments	42	16	7
	£2,084	18	6

PAYMENTS.	£	s.	d.
By Grant to National Council of Pig Breeders and Feeders	25	0	0
,, out-of-pocket expenses paid to University of Leeds re Sawley Grassland Improvement experiments	26	10	2
,, Grants to Rothamsted Experimental Station for Green Manuring and inoculation of Lucerne Seed Experiments	550	0	0
,, Grant to East Suffolk County Council for Silage Experiments	50	0	0
,, Grant to Norfolk Agricultural Station for Barley Experiments	500	0	0
,, Grant to National Institute for Research in Dairying for Whey Drying Experiments . .	200	0	0
,, Grant to National Institute of Agricultural Botany for Sugar Beet Seed Investigation . .	300	0	0
,, Grant to Norfolk Agricultural Station for Bullock Feeding Experiments	80	0	0
,, Grant to Professor Somerville for experiment on seeding down land to Grass	24	0	0
,, Grant to Institute of Agricultural Engineering for Crop Drying Demonstration at Chester Show	50	0	0
,, Books purchased in lieu of Gold Medal for Agricultural Research medallist	16	8	6
,, Honorarium for article "Electric Power in Agriculture"	25	0	0
,, Editing of "Occasional Notes"	50	0	0
,, Travelling expenses	28	5	7
,, Miscellaneous expenses	31	19	3
	1,957	3	6
,, Balance at Bank, Dec. 31st, 1925	127	15	0
	£2,084	18	6

Examined, audited, and found correct, this 23rd day of February, 1926.

T. B. TURNER, *Secretary.*

DELOITTE, PLENDER, GRIFFITHS, & CO., *Accountants.*

JONAS M. WEBB,
HUBERT J. GREENWOOD, } *Auditors on behalf of the Society.*

Royal Agricultural Society of England.

STATEMENT OF FUNDS HELD BY THE SOCIETY IN TRUST OR WHICH ARE NOT CONSIDERED AVAILABLE FOR GENERAL PURPOSES, DECEMBER 31, 1925.

	£ s. d.	£ s. d.	£ s. d.
To Hills' Bequest for Pot-culture Experiments			9,000 0 0
Less : Depreciation of Consols at time of conversion	3,582 7 11		
,, Cost of conversion	134 14 7		
			3,717 2 6
			5,282 17 6
To profit on sale of 5% War Stock			333 4 4
			£5,616 1 10
To Fund provided by the late Sir Walter Gilbey for Endowment of Lectureship at Cambridge University (after a certain date any balance on this account to become the property of the Society)			1,204 10 4
			£1,204 10 4
To Superannuation and Insurance Fund :—			
Amount set aside in accordance with declaration of Trust of July 26, 1911		9,171 5 0	
Less : Depreciation of Consols at time of conversion	1,837 18 4		
,, Cost of conversion	256 3 0		
		2,094 1 4	
			7,077 3 8
Add : Purchase of 1,367*l.* 14*s.* 9*d.* 5% War Loan at cost			1,167 0 0
			8,244 3 8
Income Tax payable on War Stock			187 8 0
Accumulation to December 31, 1925			1,010 18 5
			£9,442 10 1

	£ s. d.
By 7,222*l.* 15*s.* 0*d.* 3½% Conversion Loan Stock (1961) (purchased on sale of War Stock) at cost (*Value December* 31, 1925, at 75¼ = 5,435*l.* 2*s.* 5*d.*).	5,616 1 10
	£5,616 1 10
By 1,457*l.* 5*s.* 2*d.* Metropolitan Water A Stock, at cost (*Value on December* 31, 1925, at 63½ = 925*l.* 7*s.* 2*d.*)	1,204 10 4
	£1,204 10 4
By Investments in names of Trustees of Superannuation and Insurance Funds, viz. :—	
8,817*l.* 7*s.* 1*d.* 5% War Stock (1929–1947) at cost (*Value on December* 31, 1925, at 100½ = 8,861*l.* 8*s.* 10*d.*)	8,244 3 8
443*l.* 3*s.* 11*d.* West Australian 3½% Stock (1935–1955) at cost. (*Value on December* 31, 1925 at 76 = 336*l.* 16*s.* 8*d.*)	359 17 4
342*l.* 13*s.* 8*d.* Queensland 3½% Stock (1950–1970) at cost. (*Value on December* 31, 1925, at 71 = 243*l.* 6*s.* 1*d.*)	264 15 6
Cash at Bank	573 13 7
	£9,442 10 1

Examined, audited, and found correct, this 23rd day of February, 1926.

T. B. TURNER, *Secretary.*

DELOITTE, PLENDER, GRIFFITHS & CO., *Accountants.*

JONAS M. WEBB, HUBERT J. GREENWOOD, } *Auditors on behalf of the Society.*

[Copies of the full Report of any of the Council Meetings held during the year 1925 may be obtained on application to the Secretary, at 16 Bedford Square, London, W.C.1.]

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

Minutes of the Council.

WEDNESDAY, FEBRUARY 4, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

The PRESIDENT, in opening the proceedings, said it gave him very great pleasure to be able to announce that H.M. The King would visit the Show at Chester on Wednesday, July 8th. His Majesty would stay at Knowsley, with Lord Derby, and would motor from there to Chester. The presence of His Majesty at the Chester Show would give great pleasure to the inhabitants of the city and county, and would, he thought, be one more link in the chain which would ensure the success of the Chester meeting.

The PRESIDENT then referred to a very happy event which had just been celebrated by one of the Trustees of the Society. The Earl of Coventry commemorated his diamond wedding on January 25th, and as this was the first meeting of the Council since that anniversary Sir Gilbert said he was sure it would be their wish that he, as President, in their name, should write a letter of congratulation to Lord and Lady Coventry. The event was all the more interesting because Lord Coventry was born on May 9th, 1838, the very same day upon which was formed the English Agricultural Society, by which name their Society was first known. His lordship's connection with the Society had been a lengthy one, and he had filled almost all the offices possible. As they all knew, Lord Coventry's interest was in Hereford cattle, and he invariably filled in all his entry forms in his own hand. In those days, when large estates were being broken up and all the best in country life was passing, it was very refreshing to learn that upon the celebration of this happy event Lord and Lady Coventry had been surrounded by all their nine children and by their tenants and retainers on the Croome estate. His lordship had been referred to as " the grand old man of British sport," and very worthily deserved that title, for no one had done more for fox hunting, thoroughbred breeding, racing and steeplechasing than Lord Coventry.

The PRESIDENT, on behalf of the Council, also congratulated the Society's Consulting Botanist, Sir Rowland Biffen, on the honour of knighthood recently conferred upon him by H.M. The King.

Five new governors and 151 new members were elected.

The PRESIDENT here interposed to say how much they welcomed Mr. Barton, the new representative on the Council for Ireland.

Mr. LUDDINGTON, in moving the adoption of the Chemical Committee's report, called attention to the last paragraph of it. The Committee had found to their surprise, he said, that no one had been appointed to represent the Royal Agricultural Society on the Advisory Committee with regard to the Fertilisers and Feeding Stuffs Act. It would be remembered by the members of the Council that the Society had for the last two years taken a very active part in the matter. It had held meetings in connection with it, and it had also sent a deputation to the Minister of Agriculture. Although there were sixteen members of the Advisory Committee, there was only one member of it who really represented agriculture. That was Mr. Robbins, the representative of the Farmers

Union. It was most necessary that agriculturists should be fully represented upon the Committee. He thought, therefore, that, not only for the sake of the Society itself, but for the sake of agriculture generally, they should press for the power of appointing someone.

The PRESIDENT first put the report, excluding the resolution. This was adopted.

Mr. LUDDINGTON then formally moved:—

> "That the Council view with surprise the omission of any representative of the Royal Agricultural Society of England to act on the permanent Advisory Committee appointed to advise in the framing of a new Fertilisers and Feeding Stuffs Act. As the Society primarily concerned in the movement for bringing about an amendment of the existing Act, they feel strongly that the Royal Agricultural Society of England should be represented on such a Committee."

Mr. CHRISTOPHER MIDDLETON seconded the motion. He said he thought that the Society had been badly treated in the matter. The Council had been very active from the first in asking for revision of the Fertilisers and Feeding Stuffs Act. It had always been one plank in their platform that there should be an Advisory Committee appointed to advise on the numerous technical details which were involved in the proper administration of the Act. It came almost as a shock to him when he saw the list of the members of the Committee and found that there was no representative of the Society upon it. He thought that they ought to enter a most emphatic protest against the omission of such a representative.

Lord BLEDISLOE said he felt some embarrassment in listening to such a discussion when he was not quite sure whether he ought, under existing conditions, to continue to be a member of the Council; but he would like to say that he hoped that his friend Mr. Middleton would not suffer from shock for any prolonged period. If the resolution was passed, he would submit it very sympathetically to the Minister of Agriculture, and see if the wishes of the Council could be complied with.

The resolution was unanimously adopted.

In moving the adoption of the VETERINARY Committee's report, Sir MERRIK BURRELL thought that one word of explanation was necessary as to why the Committee had recommended that a portion of Sir John McFadyean's report, which would, of course, be published in the JOURNAL, should be issued to the Press prior to that publication. Sir John McFadyean's annual report was always full of valuable and interesting information; but this year he had compiled a report on the incidence of foot-and-mouth disease for the past six years, and especially as it referred to 1923 and 1924. In that report there was material of so much educational value, not only to the Society, but to the general public, that the Veterinary Committee thought that it would be wise and desirable that it should go out to the Press at once and should not only be published in the JOURNAL, where comparatively few people had the chance of reading it. It at once became apparent to the Committee on reading the report that the unvarying and strong support which the Council had always given to the slaughter policy had been more than justified. The most superficial study of it, especially of the latter part, in which there were comparative tables of the incidence of the disease in Great Britain and Ireland and in the neighbouring countries in the west of Europe, would show the comparatively happy condition in which this country was as compared with the deplorable conditions in other countries. The most conservative estimate that one could make showed, he thought, that if during the last years we had not maintined the slaughter policy, the loss in this country, instead of being under one and a half million pounds, to be borne by the whole nation, would have been at least four and a half million pounds, which would have been a direct loss borne entirely by the farming community. In addition, there was not the slightest doubt that this country, instead of being almost free of the disease, as it was at the present moment, would have been overrun with it from the North of Scotland to Cornwall.

The PRESIDENT said that before he put the motion for the adoption of the Report of the SELECTION AND GENERAL PURPOSES Committee, he would like to refer for a moment to the death of their old friend Mr. Powell. Mr. Powell was known to practically every agriculturist in England, because of his many years' association with the Shorthorn Society and the Smithfield Club. He was a friend to everybody who had anything to do with him, and they all deeply regretted his loss. He would like, if it was the wish of the Council, to send a letter from the Society to Mrs. Powell.

The suggestion was agreed to, the members standing.

The HON. CECIL PARKER then moved the adoption of the SELECTION Committee's report, excluding the paragraph dealing with the dismissal of a member.

This part of the report having been received and adopted, a resolution to the effect that Mr. Robert Graham, of Auchengassel, Twynholm, be dismissed from the Society, was unanimously adopted, on the motion of the Hon. CECIL PARKER, seconded by the DUKE OF DEVONSHIRE.

The DUKE OF DEVONSHIRE, in moving the adoption of the RESEARCH Committee's report, said that it might interest members of the Council and enable them thoroughly to appreciate the variety and importance of the Committee's work to hear the subjects which were referred to at one meeting of the Committee on the previous day. The Committee had had to deal with questions of bullock-feeding, germination tests, lucerne, green manuring, the yield of oats, silage, the flooring of cow-sheds, incubators, the laying down of land to grass, and wool. The programme was a fairly comprehensive one. The Committee met eight times a year. He had been a very irregular attendant at the meetings of the Committee; but perhaps he might be permitted to say that he had never served upon a Committee which had been more industrious and hard working. It was trying to do in twenty-four hours in the year what he had not the slightest hesitation in saying would afford ample work for a strong Committee giving to it a full day's work once a week throughout the whole year. He thought that that was some justification to the Council for having adopted the line which it had adopted in providing the money. He believed that the Committee was doing useful work. He thought that the Council could quite justifiably expect, when it was asked to provide a large sum of money for continuing the experiments, that the Committee should be in a position to place some further results before the Council and before the public as a whole. The Committee was most anxious to do that. One could naturally understand that, in the investigation of various problems such as he had referred to, it was not always easy to determine the precise moment at which a report could be made. He hoped that at the next meeting of the Council the Committee might be in a position to make some further suggestions as to the taking of immediate steps to give further details in reference to the progress of the work which was going on.

Sir DOUGLAS NEWTON—pursuant to notice—moved:—

> "That the Royal Agricultural Society of England desire to draw the attention of the responsible authorities to the need of encouraging genetic research and field trials for yield and quality of sugar beet."

Farmers in the Eastern Counties, he said, now saw a remarkable new agricultural development in the building and encouragement of factories for the production of sugar. It was the one ray of sunshine which agriculture, so far as arable agriculture in the Eastern Counties was concerned, had seen for a very long time. Anyone could foretell that if the factories were successful many more would be erected. The movement was clearly a big one, and he hoped that the industry had come to stay. A very small percentage indeed of the seed required, which amounted to many hundreds of tons, was produced in this country. He felt that the Royal, as the premier Agricultural Society, should do all it could to see that the seed was produced in this country as far as possible, and that that side of the industry was encouraged. Naturally enough, perhaps, growers used the foreign seed because they wanted to get the highest sugar content, and they also wanted to get the highest yield per acre. Until research had been carried out by responsible authorities, the confidence of the English farmer would not be given to the English-grown seed and the English-grown root. It was for that reason that he urged the need of trials.

Colonel G. L. COURTHOPE supported the resolution. The really strong reason why official action was necessary in the production of seed was that from the time of the purchase of ordinary commercial seed it took a full seven years to produce reliable seed again. Many people thought that it could be done in two years, but it could not. That was one of the great obstacles against what was suggested being done by the private enterprise of an infant industry; but a good deal had been done. There had been a propagandist body, the British Sugar Beet Society, in existence in one form or another for years. It had made arrangements in various directions for a certain amount of research. At its request, Professor Bateson had been working for years on the subject. One of the special points upon which he had been labouring was the attempt to transfer the rich sugar content from the fang into a root that could grow on the surface, in order to eradicate the great obstacle to sugar beet cultivation, namely, the difficulty of lifting. A proposal was put before the Development Commission in either 1911 or 1912 for the establishment of a seed-producing station in this country. That proposal was recommended, if his memory was correct, by the Development Commission, but turned down by the then Minister of Agriculture, in consultation with the Treasury. He hoped that the present Minister would take a more sympathetic view, if the recommendation of the Development Commission did not come under the Statute of Limitations, but still held good. Seed was being produced successfully at Wye, and other agricultural colleges; and a certain amount was produced under the auspices of Home Grown Sugar, Ltd., at Kelham. A great deal of valuable work on the subject had also been put in by Suttons, of Reading. Therefore research was not entirely new, but it needed encouragement. He hoped that the Society would take the subject up and try to induce the powers that be to give their support in the matter.

Mr. HENRY OVERMAN said that, in reading the resolution, he had wondered who the responsible people were whose attention was to be drawn to the subject. Farmers in Norfolk had grown sugar beet for many years, many years before farmers in other counties had thought of growing it at all. He would not like it to be thought that they had not thought about the seed question. It had been before them for the last three or four years. They approached Sir Daniel Hall, and held a meeting at the offices of the National Farmers' Union, at which he was present. When he mentioned the names of the gentlemen present, members would see that it was a pretty representative meeting of what he might call scientific workers in that sort of research, and that their conclusions ought to be of some value to the Council. There were present at that meeting, Prof. Sir R. H. Biffen, Prof. Bateson, and Sir Daniel Hall, and there were representatives of the seed trade, Mr. Sutton and Mr. Miln of Garton's—two firms who, perhaps, had done more for the improvement of the seeds of all cereals and roots in this country than anyone else. There were also present practical growers, principally from Norfolk, in which county the infant sugar beet industry was started. The conclusions that they came to were that the job was a very long one, and that it was not going to be done in one year, but that it might take five, seven, or ten years. The meeting came to the conclusion that the best way to deal with the matter was to leave it in the hands of those very prominent seed merchants. The work had already started. He did not see who else could be got to do the work if one did not go to the big firms who were adepts and who knew the thing from A to Z. He must admit that it was most necessary that the matter should be dealt with. The contract that they had with the factories provided that the factories should supply the seed, which was practically all foreign. He admitted that that was not right. He would like to see the seed not only grown in England, but improved in England. There was no doubt that the people of this country were second to none in making improvements in such directions. It was his one regret that the money which started sugar-beet factories in this country was principally foreign money.

Lord BLEDISLOE endorsed Mr. Overman's appeal that Sir Douglas Newton should make clear what he meant by "responsible authorities." He rather assumed, from what had been said, that the Ministry of Agriculture was—possibly—one of the responsible authorities that might be indicated in the resolution. He would like to say—of course he was speaking without the book—that he thought it would be a disastrous thing if any Government Department were to entrench upon the legitimate and progressive sphere of our great seed producers or seed merchants in this country. After all, private enterprise had probably done more as regards efficient seed production in this country than had been done in any other country in the world. He would be very sorry indeed if a Government Department were expected to take over such work. On the other hand there were research institutions under Government ægis in this country. He was rather wondering, when Mr. Overman was speaking, as to which of the research institutions would naturally deal with the subject. He could not foresee at the present moment, with a peculiarly vigilant Chancellor of the Exchequer, what Colonel Courthope adumbrated as an extremely expensive enterprise being embarked on under existing conditions. If it was Cambridge, possibly Cambridge already had the matter in hand with its National Institute of Agricultural Botany. If it had not, no doubt it would take the matter in hand at an early date. He was sure that in that action the Ministry would give all possible sympathy.

Mr. MILN was very glad to hear what Mr. Overman and Lord Bledisloe had said. The leading seed merchants had, he said, had the matter in hand for some years; but they had not been able to grow seed on an extensive scale in this country simply because the factories had been controlled by foreign money. The factories insisted upon getting their supplies of seed from abroad. Those who had any knowledge of the mangold wurzel were well aware of the fact that the improvements which had taken place in mangold wurzels in this country were not second to any of those obtained in any other country in the world. The type of roots and the analysis of them were superior to anything known on the Continent or in any other country. After the meeting to which Mr. Overman had referred, seed merchants had gone into the matter still more extensively. They had had analysed the sugar-beet grown from what they called their homegrown sources in this country. The contents of them were quite equal to anything grown from seed supplied from abroad. If the leading seed houses only knew that there was a market for their produce they would be quite prepared to grow sugar-beet seed here on a very extensive scale. If thousands of tons of beet were cultivated in this country that would be another asset in our agriculture. Seed merchants were working on those lines, and they hoped that when some of the factories were controlled by English money instead of by foreign money they would have an opportunity of supplying the seed. They were quite capable of supplying seed which was equal to anything coming into the country.

Sir DOUGLAS NEWTON, dealing with some of the points which had been raised, frankly admitted that much had been done; but he pointed out that a great deal remained undone from the point of view of getting both a better quality of seed and a better yield per acre. Mr. Overman had referred to the words "responsible authorities." He (Sir Douglas Newton) really had in mind the practical sympathy, in financial terms, of the Ministry of Agriculture in encouraging those who were dealing with the problem. If the Ministry of Agriculture were sympathetic, the Development Commission would unloosen their pockets, and there would be financial resources for carrying out experiments with advantage and benefit to the industry. It was true that there was an excellent seed-testing station supported by the seed trade, in fact, almost started by the seed trade, in the National Institute of Agricultural Botany at Cambridge. They would be prepared to do anything that they were asked to do. But these things turned on the question of finance, and it was for that reason that the sympathy of the Ministry was so essential in the development of the industry.

After some further discussion, in which Col. COURTHOPE, Mr. MILN, Mr. ADEANE, the DUKE OF DEVONSHIRE, Sir DOUGLAS NEWTON and the PRESIDENT took part, Mr. MIDDLETON moved as an amendment that the subject be referred to the Research Committee, who should be asked to report to the next meeting of the Council.

The motion was seconded by Mr. ADEANE and carried.

The original motion was then put to the meeting.

Sir DOUGLAS NEWTON asked whether he might move as a substantive motion that the Research Committee should be empowered—because time was flying and the matter was an important one—to get into touch if they so desired with the Development Commission, the Ministry of Agriculture, or any other responsible body.

The PRESIDENT thought that the Council could safely leave the matter in the hands of the Committee.

Sir DOUGLAS NEWTON said that he was content as long as it was understood that the Committee had the power.

WEDNESDAY, MARCH 4, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

Before beginning the proceedings the SECRETARY, at the PRESIDENT'S request, read letters received from the Earl of Coventry, acknowledging the Council's congratulations on his diamond wedding, and from Mrs. Powell, thanking the Council for their expression of sympathy on the death of her husband, the late Mr. E. J. Powell.

Two new Governors and 190 new Members were elected.

The Report of the FINANCE Committee having been presented, Mr. ADEANE moved first of all the adoption of that part of it which did not refer to the accounts or the estimates. This portion of the report having been adopted, Mr. ADEANE, dealing with the accounts, said that last year the Society began with a balance carried forward of £3,368, and the income from all sources during 1924 was £19,926, giving a total of £23,295. The payments, which included an investment of £2,500 in Conversion Loan, amounted to £19,421, and the balance carried forward at the end of the year was £3,874. With regard to the balance-sheet, the only matter to which he need refer—he thought that it was a satisfactory one—was the reserve fund. That now stood at £116,033. If the Members of the Council would refer to the sheet which dealt with the funds held by the Society upon trust, they would see that there was a fund held in trust that was left by the late Sir Walter Gilbey. That fund was very generously established by Sir Walter some years ago to start an Agricultural Lectureship at Cambridge. At the end of twenty-one years the capital sum was to fall into the absolute possession of the Society, the idea being that a part of it should be used for the redemption of the Harewood House debenture stock. As a matter of fact, when Harewood House was sold, twenty years ago, those debentures were extinguished. The Finance Committee recommended that the Council should continue to grant the interest on the money to the University of Cambridge to assist the University in maintaining the Lectureship. He hoped that the Council would agree to that course being adopted. The present value of the fund was £934.

The Accounts were adopted together with the estimates of receipts and expenditure during the present year.

In presenting the Report of the Journal and Education committee, Col. CORNWALLIS said that the generous gift by Major Amery would, he believed, give the Society the most complete collection of Arthur Young's works possessed by any institution in the Kingdom.

The CHEMICAL Committee's Report was read, and, in moving its adoption, Mr. LUDDINGTON said the Committee felt that the Council were much indebted to Lord Bledisloe for the prompt action he had taken in the matter and the help he had given. It was satisfactory to know that the Society would be represented on the Advisory Committee in connection with the Fertilisers and Feeding Stuffs Act; but, at the same time, the Committee felt that the Council ought to have been represented on the other committee, the Technical Committee. He thought that the Society's Chemical Adviser could have helped very much in drawing up the schedules and in the technical work. The other Committee seemed almost to be an afterthought. Notice was given in the Press, first of all, when the Committee was set up, and it seemed as if there would only be one Committee, which would deal with the whole matter. Now, it seemed, there was another Committee to be appointed to deal with the subject when the schedules had been passed. The Chemical Committee felt that a Society of the standing of the Royal ought to have had some representation on both Committees.

Mr. CHRISTOPHER MIDDLETON wished to say a few words before the report was adopted. He was glad to see that Lord Bledisloe was present. Lord Bledisloe had been good enough to send him a copy of the letter he had addressed to Sir Gilbert Greenall on the question. Some further correspondence had taken place. He was very much obliged to Lord Bledisloe for the kindness he had shown in the matter. At the same time, he was anything but satisfied with the explanation given by the Ministry. He understood at the time, and he still understood, that a principal recommendation of the Committee was that there should be an Advisory Committee set up which would become a permanent Advisory Committee to advise on technical matters. The complaint at the Council Meeting a month ago was that the "Royal" was not represented on that Committee. It appeared that the Committee, which was not a small Committee (it had sixteen members, he thought) had appointed a smaller Committee from itself to draw up schedules which were the very foundation of the Act. He did not think that any co-optation of a member of the Society now would have very much effect. The foundation had been laid. The reference to the Committee was to draw up schedules with definitions. The schedules were absolutely the essence of the Act. The fact that the "Royal" was not represented on that Committee was, he considered, a very great misfortune. He did not think that very many members of the Council were competent to sit on the Committee: very few, if any, of them had the technical knowledge required; but he said without hesitation that it was a very great misfortune that Dr. Voelcker, who had been a member of the original Departmental Committee, had not been put upon it. He did not know whether the inclusion of his name would have very much effect now. He was afraid that the omission might have caused a very great deal of harm. He felt bound to make this protest, as he could not quite agree with the report of the Committee when he was present at the meeting on the previous day.

In moving the adoption of the report of the BOTANICAL AND ZOOLOGICAL Committee, Colonel WHEELER called attention to the reference in the report to damage to wheat caused by frit fly. Just two years ago the Society had an exactly similar report with regard to oats. It seemed that there was a very considerable risk in planting corn after rye grass.

A suggestion by Mr. FRANK MATTHEWS that the Class in the schedule for " Shorthorn heifers in milk born in 1922 " should be altered to read " Shorthorn heifers in milk or *in calf* born in 1922," was referred to the Stock Prizes Committee for consideration when drawing up the Prize sheet for the 1926 show.

The DUKE OF DEVONSHIRE, in moving the adoption of the report of the RESEARCH Committee, said a special resolution would have to be passed in the event of the Council approving the minutes of the Committee with reference to Sir Douglas Newton's proposal. The report in the hands of members of Council dealt with some of the activities of the Committee, but it was only an interim report of progress in dealing with a very considerable number of subjects.

The Committee's report having been adopted, it was resolved, on the motion of the DUKE OF DEVONSHIRE, seconded by Sir MERRIK BURRELL :—

> " That the R.A.S.E. desire to draw the attention of the Ministry of Agriculture and the Development Commission to the need of encouraging genetic research and field trials for yield and quality of sugar beet."

Colonel G. L. COURTHOPE said there was a Bill now in committee in the House of Commons dealing with the importation of pedigree animals, and by the Bill the test as to the availability for importation was to be the recognition of the breed by the Minister of Agriculture for the time being. The Minister would have to decide whether or not a foreign Herd Book should be recognised as qualifying for admission into this country. There had been no time to consult the President; but some of the Members interested were endeavouring to delete the " Minister of Agriculture " as the judge and to insert the " Royal " as the deciding factor as to whether the foreign Herd Book should be recognised as qualifying a foreign breed. He thought that he ought to mention the matter. The Bill would be before Standing Committee B in the House next week.

The PRESIDENT thought that the suggestion was a most excellent one, because practically every breed was represented in the Society.

Other Members of Council having spoken in support of the proposal,

Lord BLEDISLOE said that it was obviously impossible for him to express an opinion on the matter. If he did, he might find himself officially differing from his views as an individual. In any case, if the matter came before the Ministry, it would receive due consideration.

WEDNESDAY, APRIL 1, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

The PRESIDENT said he felt sure the Council would all learn with regret of the death of Mr. W. J. M. Dagnall, which had come upon them with great suddenness. Mr. Dagnall had been a servant of the Society for over thirty-seven years, and had filled nearly all the clerical positions in the office before being appointed Chief Clerk and Cashier. The PRESIDENT was sure it would be their wish that he should convey to Mr. Dagnall's widowed mother, his three sisters and brother, the Council's very sincere sympathy in the loss they had sustained, and he would, as President of the Society, formally move that a vote of condolence be sent to Mr. Dagnall's relatives. The Council signified their agreement by rising in their seats.

Seven new Governors and 144 new Members were elected.

On the presentation of the Report of the CHEMICAL Committee, Mr. CHRISTOPHER MIDDLETON said that he agreed with the report, but would like to accentuate that part of it which dealt with milling offals. He thought it was quite impracticable that there should be a division into so many grades mainly based upon fineness of grinding. From his experience, farmers received less value in their purchases of milling offals than they received in connection with anything else that they used. He thought that the point to which he had referred should be thoroughly gone into again, because the way in which offals were dealt with was quite unsatisfactory.

Sir MERRIK BURRELL, in presenting the VETERINARY Committee's Report, said the Council would remember that a great difficulty was recognised by most people in the first big outbreak of foot-and-mouth disease owing to so many local authorities having power to issue regulations. There were some 355 authorities in England and Wales which could issue regulations. That had led to very great administrative difficulty, and it was felt that great danger was caused by the mere fact of there being so many such authorities. Evidence had been given before Captain Pretyman's 1922 Committee to that effect. He personally gave evidence, and brought forward concrete instances of the harm that had been done. The views expressed were accepted by the Committee, and, in their report, they recommended that there should be only one authority under the Diseases of Animals Acts in any one geographical county. The Council early last year sent in a recommendation to the same effect. When the report of Captain Pretyman's 1925 Committee, as he would call it, came out the other day it was seen that it contained, when it came to deal with this question, what seemed to be some very contradictory paragraphs. In effect, it went back entirely upon what was recommended in 1922. It said: "It is clear that the present policy"—that was the policy of having so many local authorities making Orders—"results in anomalies and tends to detract from the value of regulations made by a county, when the boroughs in that county do not take similar action." Then it went on to say: "The successful formation of the suggested Joint Committee for the purpose of making regulations would be of great value. It would, we think, tend to prevent the making of unnecessary restrictions, and, by enabling local authorities more readily to realise and to appreciate each other's interests, would lead to the establishment of a much better feeling between the counties and the boroughs, which would in itself contribute materially to the success of eradication measures." That was exactly in accordance with the evidence given before the Committee when they sat formerly; but, notwithstanding that, they went on to say: "In view, however, of the inherent difficulty of securing adequate representation of diverse and frequently conflicting interests, which, after very careful consideration, we can see no method of overcoming, we think the recommendation in favour of a joint committee must be abandoned." The Departmental Committee did not give any particulars at all of what the inherent difficulties were or why they could not be overcome if they existed. He had spoken to people like chief constables and chairmen of County Councils and other people who might be expected to know; but not one single person had given him any reason to think that such difficulties as there were could not be overcome with a little goodwill between the County Councils and the boroughs. He believed that the real difficulty was jealousy in the minds of the Borough Councils, who thought that the County Councils might interfere with their markets and possibly with the provision of an ample supply of fresh meat to their populations. He did not for a moment think that if the suggested Joint Committee were set up that would be the result. He considered that the result would be that there would be perfect harmony in action, that the populations of the boroughs would be adequately fed, and that the interests of the agricultural community as regards their flocks and herds could be perfectly well safeguarded.

Mr. ALFRED MANSELL, as a member of the first Departmental Committee, said that all the members were unanimous upon the question of having one authority in each county. He very strongly supported the recommendation.

The Council of the "Royal," the National Sheep Breeders' Association, and many other public bodies, had been asking the Ministry of Agriculture to do everything it possibly could to eradicate sheep scab. They had called attention to the fact that Australia and New Zealand, which were very big countries, had been able to eradicate it. They had told the Ministry on several occasions that the only possible way of getting rid of sheep scab was by throwing the onus on the owner of the flock. An Order was issued on June 30th, 1923, which came into operation on July 30th, 1924. That threw the onus on the owner to keep his flock clean. The owner could be fined a sum not exceeding £20 in the first instance, and he took it that afterwards he could be fined whatever the magistrates thought fit. The Council had called the attention of the Ministry to the fact that no headway was being made against the disease, and they had always been told to "wait and see." They had waited and seen the result of the Order. There had been thirty more outbreaks this year than last year, and fifty-two outbreaks last month as against twenty-two in the month before. The disease was very widespread. It was not as if it was confined to one county, but it was practically all over the country. It would never be got rid of until the magistrates imposed adequate fines, and threw the whole onus for sheep scab on the owner. He hoped that the Council would send a letter to the Ministry, calling attention to the fact that the Order had been an utter failure, and pointing out that the only possible way of dealing with it was to secure that those who sat on the bench imposed adequate fines.

Colonel G. L. COURTHOPE suggested that, in the event of the Council approving of the proposed letter, steps should be taken to bring it before the Minister of Agriculture that afternoon. There was to be a meeting of the Advisory Committee that afternoon at half-past two, and one of the points upon the agenda was the matter of sheep scab. He saw that Lord Bledisloe was present, and possibly his Lordship might be a useful messenger.

Lord BLEDISLOE said that, as Colonel Courthope had alluded to him, perhaps he might be allowed to say a few words. First of all, in reply to Mr. Mansell, he assured the Council that, whatever the Ministry of Agriculture might have been in the past, they were not at the present moment a "wait-and-see" Ministry. Their great anxiety was as to whether their agricultural friends in the course of the next few years might not view them with some suspicion as being an unduly revolutionary body. Both as regards sheep scab and as regards foot-and-mouth disease, the great difficulty was the question of local autonomy. So far as the magistrates were concerned, the Ministry had very little to say in relation to them. That was more a matter, perhaps, for the Home Office than for the Ministry.

With regard to the paragraph in the Departmental Committee's report to which Sir Merrik Burrell had referred, it had occasioned at least as much surprise in the Ministry of Agriculture as it had occasioned in the Council. In fact, the matter was now being investigated. But he was bound to say that, on review, the Ministry were prepared to accept the position that the time had come when there ought to be one authority only within the geographical county. The opinion of the Council in support of that view would undoubtedly influence the decision of the Ministry in that respect.

The spread of sheep scab was unquestionably serious, and was causing anxiety; but whatever might be done as regards the individual delinquent by the magistrates, the real trouble, when all was said and done, was that certain counties claimed for themselves in those matters an autonomy which many people thought had better be replaced by a stronger centralised administration. With regard to double dipping and the period within which that dipping was to take place throughout the country, he ventured to hope that the Council would support any action that the Ministry might be prepared to take in the matter.

Sir **Arthur Hazlerigg**, referring to the remarks which had fallen from Sir Merrik Burrell in reference to the Departmental Committee's report, thought that all the members of the Council had been very much surprised to see that the Committee now stated that the inherent difficulties were too great to have one authority for the county and county boroughs. He would like to say, as one who had served as Chairman of a County Council, that he did not think that the difficulties were such that they could not be overcome. He thought that he was correct in saying that both the County Councils Association and the Council of Agriculture for England had recommended that there should be one authority for each county. He hoped that, in view of those expressions of opinion, the Ministry would see that the report of the Departmental Committee on that particular subject had not much regard given to it.

Sir **Douglas Newton** said that, as he understood that there was a possibility of Lord Bledisloe acting as messenger between the Council and the Ministry, he would like to suggest that he might also be good enough to look into the question of swine erysipelas. In his part of the world there had been a good deal of discussion about that matter. He could not claim to have any technical knowledge of it, but he understood that one of the methods of treatment depended upon a supply of virus, bacteria, and so on, and that supplies were not obtainable in this country. A great deal of feeling had arisen in regard to that matter.

Alluding to sheep scab, he would like to say that agriculturists in his district felt that the onus should be placed upon the owner of the sheep. There was, he was sorry to say, a great deal of opposition to double dipping, particularly if it took place at certain times of the year. It was claimed that it made the sheep sterile, and that it had a very deterrent effect upon the number of lambs. Whether or not that was so he did not know ; but that was a view strongly held amongst some farmers, particularly where the short wool sheep were concerned. It was said to affect them much more than it affected the long wool sheep.

Mr. **Davis Brown** wished to make one remark upon what had fallen from Lord Bledisloe in which he seemed to adumbrate that the Ministry of Agriculture might go in for a double-dipping Order all over the country. That hardly seemed necessary. Suppose that there was a stray case in the county from which he came, Norfolk. To insist upon the double dipping of every flock of sheep on account of a single case that might appear in a county was like trying to crack a nut with a sledge hammer. It seemed to him that the Ministry ought to insist upon double dipping at the seat of the disease and at the place where it was particularly prevalent, and not all over the country.

Mr. **Tindall** said that, as one who had been Chairman of the Lindsey County Council in Lincolnshire, he would like to say that he felt certain that there would be very little difficulty indeed, so far as his own county was concerned, in carrying out the proposal which was now before the Council. He would like to support to the full what had been said by Sir Merrik Burrell. He had had some little experience in the matter, and he did not think that there would be any difficulty at all, or at any rate there would be very little difficulty between the boroughs and the counties. The only difficulty, as far as he knew, would be, so far as the boroughs were concerned, in connection with the fat animal and the store animal. The boroughs had something to say with regard to the supply of cattle to their markets. He believed that when those concerned got together the difficulties would very soon be settled.

He would like to support Mr. Mansell in what he had said with regard to sheep scab. It was nothing short of a scandal that there should be sheep scab in Great Britain. He would be one of those who would go to any extreme with a man who had sheep scab on his premises after a certain time.

Sir MERRIK BURRELL said that, before the motion for the adoption of the report was put, he would like to ask whether Sir John McFadyean bore out the suggestion made by Sir Douglas Newton that double dipping was a cause of sterility in sheep. If it was not true, and if it went out into the Press, it would have a rather deplorable effect on the minds of flock owners. It was hard enough now to get flock owners to do what was required, but if that kind of suggestion was put into their minds and if it was not accurate it would have a very bad effect.

Sir JOHN MCFADYEAN said that he had great difficulty in understanding why anyone who had studied the history of sheep scab in this country should be in favour of compulsory universal double dipping. It seemed ridiculous, seeing that there was not anything like 1 per cent. of the flocks in this country that had sheep scab. It could do nothing towards the eradication of the disease to compel, he thought it would probably be, about 999 people out of a thousand who had not sheep scab, to dip their sheep. It would be a futile proceeding, and it would do no good to anyone except those who were engaged in the manufacture of dips. He was quite sure that it was a mistake to suppose that double dipping caused sterility. Long experience had shown that it did not.

The Veterinary Committee's Report was then adopted, and, on the motion of Sir MERRIK BURRELL, seconded by Mr. MANSELL, it was resolved that a letter in the following terms should be signed by the President and sent to the Ministry of Agriculture :—

Report of Departmental Committee on Foot-and-Mouth Disease.

The Council of the Royal Agricultural Society desire to express their regret at the reversal of opinion of Captain Pretyman's Committee of 1922 as to the desirability of there being only one Diseases of Animals Committee in each geographical county by the Committee which has reported recently. The Council recognise that there are difficulties, but do not agree that they cannot be overcome.

The Council therefore beg to forward to you their resolution of February 6th, 1924, which they reaffirmed at their meeting of April 1st, 1925 :—

> "That the Council of the Royal Agricultural Society is strongly of opinion that legislation is urgently needed providing that there shall be one Authority only for the control of Animal Diseases in each geographical county, which should be a Joint Animal Diseases Committee representing the County and Borough Councils within the boundaries of such County."

After some further discussion, the SECRETARY said that in the event of an emergency arising he would communicate with the President, and he pointed out that the Council had to endorse whatever the Veterinary Committee did.

Mr. ALFRED MANSELL moved :—

> "That the Council desires to call the attention of the Ministry of Agriculture to the failure of the Sheep Scab Order of 1923, as at present administered, and urges the Ministry to give the matter their most serious and prompt attention."

This was seconded by Mr. TINDALL, and carried.

Colonel STANYFORTH presented the IMPLEMENT Committee's Report. He was sorry to say that the entries of implements were not so large as in recent years ; but, considering the badness of trade generally, and the fact that implement makers had had very bad times lately, the Committee were not at all surprised. As a matter of fact, the entries were quite up to their expectations, and, needless to say, there would be plenty of implements to make a good show.

Mr. ALFRED MANSELL said he was not aware until that morning that he had been appointed one of the representatives to wait on the Minister of Agriculture. It occurred to him that if members of the Council had any suggestions to make they might put them in writing and send them to the Secretary, who could then pass them on to Sir Gilbert Greenall, Mr. Evens, and himself.

The PRESIDENT hoped that members would do as Mr. Mansell had suggested. If anyone had anything which he would particularly like to have brought before the Minister he should let the representatives have notice of it in good time before they had an interview with the Minister, and they would see that the matter had every consideration.

The Report of the RESEARCH Committee having been presented, Sir DOUGLAS NEWTON said the Council had not had all the particulars with regard to the scheme which had been arranged with the National Institute of Agricultural Botany; but he would like to say how greatly they welcomed the very generous provision which had been made for dealing with the matter of sugar-beet development. The matter was raised in the House of Commons a few days ago on the Second Reading of the Sugar Beet Bill. The resolution of the "Royal" was then referred to, and the Minister of Agriculture expressed himself as being in full sympathy with the terms of that resolution, and undertook to advance the cause of genetic research in connection with the Development Commission and his own Department.

Lord BLEDISLOE wished to refer to one matter. He noticed that the Committee had decided not to proceed with the investigation into the protein content of roots. He thought that in this country we had been perhaps a little behindhand as compared with certain Continental countries in this line of research. In recent years most valuable work had been done in this connection by the Agricultural Department of Denmark. In fact, the most up-to-date work on this subject came from Denmark. The results had been published in English, and he ventured to hope that some members of the Council, at any rate, would study them.

On a motion from the chair, the seal of the Society was affixed to the agreement with the Corporation of Reading in connection with the holding of the 1926 Show, and to a letter of attorney to the Society's bankers for the sale of £5,560 17*s.* 8*d.* Five Per Cent. War Stock 1929–1947.

WEDNESDAY, MAY 6, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

Before commencing the business on the agenda, the PRESIDENT referred to the loss the Council had sustained in the passing of Mr. W. W. Chapman. Mr. Chapman was, he said, a man of many parts and a most industrious worker in the cause of live stock breeding and its improvement. He became a Member of the "Royal" in 1881 and a Governor in 1913, since which year he had represented the division of London on the Council. He was at the time of his death Secretary of the National Cattle Breeders' Association and the National Sheep Breeders' Association, and had been connected with the Southdown, Kent or Romney Marsh and other sheep societies. As a shipper and exporter of live stock, he must have had some valuable animals through his hands at various times, whilst as an agricultural journalist his untiring pen had expressed his views in many journals and in other branches of literature.

The PRESIDENT added that he happened to be in the office when the Secretary received notification of Mr. Chapman's death, and he immediately wrote to his widow, but he was sure it would be the wish of the Council that he should convey their sympathy to Mrs. Chapman and her family.

The members present signified their assent by rising in their seats.

The PRESIDENT said he was sure all the members would very much regret to hear that their good friend Mr. Miln, who had taken such an active part in the arrangements for the Chester Show, was knocked down by an omnibus at Euston Station on the night before last. He broke his leg and fractured a small bone in his ankle. The leg was set yesterday. He had heard that morning that Mr. Miln was going on very well and had had a comfortable night.

Three new Governors and 184 new Members were elected.

On the motion of Mr. ADEANE it was resolved :—

> "That the Westminster Bank, Ltd., 1 St. James's Square, be requested to open a new current account, in the name of the Society, to be styled 'Gilbey Bequest Account,' and to transfer to the credit of this account the sum of £206 9*s.* 4*d.* from the Society's General Account, representing accumulated income and funds uninvested.
>
> "That the Bank be authorised and directed to invest this sum in the purchase of Metropolitan Water Board 'A' Stock in the name of the Society as an addition to the existing holding of £1,140 of like stock, and to hold the certificates of the entire holding on a separate security account styled 'Gilbey Bequest Account.'
>
> "That the Bank be directed to place to the credit of the Gilbey Bequest Account all dividends received on the above holding of Metropolitan Water Board 'A' Stock."

The first three paragraphs of the Report of the CHEMICAL Committee having been presented, the PRESIDENT said that a resolution had been handed in by Lord Strachie. It would be seconded by Sir William Mount. It rested with the Council whether it was allowed to be put or not. The proper notice had not been given, but under the bye-laws the Council could decide. It was as follows :

> "That the Council of the Royal Agricultural Society of England is opposed to any duty being placed upon imported superphosphates."

He asked whether the Council would allow it to be moved.

Permission having been given, Lord STRACHIE moved that the resolution which the President had read should be adopted by the Council. He did it on the following grounds. The Agricultural Committee of the Somerset County Council the other day unanimously passed a resolution to a similar effect, and he thought it very desirable that a great Society such as the Royal, which represented agriculturists, should be asked to pass a similar resolution, because of the great weight and effect that it would have with the Board of Trade in such a matter. It was not necessary for him to labour a matter of that sort, with so many experts present, who, he thought, would entirely agree with him that it would be a very serious matter indeed if the application of the manufacturers of fertilisers was acceded to. The object of the manufacturers seemed to be either the entire prohibition of the import of superphosphates or the imposing of such a heavy duty upon them that the cost to the arable farmer would be increased from 50 to 100 per cent., or might even be trebled. Those who were interested in the cultivation of arable land considered superphosphates very much as their raw material. It had always been said in reference to raw material that no taxation at all ought to be put upon it. He was one of those who felt that it was a very serious matter indeed to begin to enter upon the question of imposing taxation upon imports of raw material, whether the farmers' raw material or the manufacturers' raw material. The fertiliser manufacturing industry was not like a new industry, such as the sugar-beet industry, which was an entirely different matter. It was usually acknowledged that in the case of a new industry it might be desirable to give a subsidy for a certain number of years in order to start it. This was an entirely different matter. He was quite sure that arable farmers, whether they were growing corn or growing potatoes, would agree with him when he said that it would be a very serious matter indeed for them if a heavy duty was put upon superphosphates, and that it would certainly be ruinous if the import was prohibited altogether.

Sir WILLIAM MOUNT, in seconding, said that he did not think that he need add much to what Lord Strachie had said. Although it might be said, and he dare say with truth, that the manufacturers of superphosphates in this country had been very hard hit, no one, he thought, could deny that agriculturists were equally hard hit, and a time when every effort was being made to encourage the use of artificial manures amongst farmers seemed to him to be rather an inopportune time to impose a duty which might have the effect of hampering the use of a very useful article like superphosphates.

Colonel G. L. COURTHOPE said that, while he was in entire agreement with the mover and seconder of the motion that anything that might hamper the agricultural industry or add to its difficulties should be opposed by the Society, he should rather deprecate the passing of such a motion until the Society had before it the Report of the Safeguarding of Industries Committee, which he understood was investigating the matter. He did not think that members knew enough about the question. Personally, he frankly confessed ignorance on the subject. He thought that it was conceivable that when they had full information before them they might find themselves in the position of discovering that it was a question between maintaining two sources of supply—a foreign supply and a home supply—and eliminating the home one, and leaving it entirely in the hands of the foreigner. If that position did arise, he doubted whether it would be in the interests of the farmer, the user of superphosphate, to refuse to maintain the British industry. On the other hand, they might find a totally different set of circumstances which would entirely justify Lord Strachie's proposal. He would ask Lord Strachie to consent to an adjournment of the discussion until the Report of the Safeguarding of Industries Committee on this particular subject was in their hands.

Mr. CHRISTOPHER MIDDLETON said that the matter came before the Chemical Committee on the previous day, and while a good many of the members were entirely in sympathy with the motion moved by Lord Strachie, they felt that there were two sides to the question, and that it was not opportune at the moment for the Council to take the action indicated by Lord Strachie's motion. There was a Departmental Committee considering the question, and he thought that, until members had the Report of that Committee in their hands, they were scarcely in a position to pronounce a final opinion on the matter. He thought that it would be a very good thing for the Society to nominate someone representing the large users of superphosphates in this country to give evidence before the Committee. There was no doubt that there was a good deal to be said on either side, and it was possible that, if the motion were carried, it might eventually make superphosphates dearer instead of cheaper. He believed that there were very great difficulties at the present moment attached to the manufacture of superphosphates in this country. The passing of the motion might possibly do a great deal of harm. He thought that the best course to take at the present moment would be for Lord Strachie to withdraw his motion, and ask that the Society should send a witness or witnesses to give evidence before the Committee.

Mr. LUDDINGTON said that he had thought it best that paragraph 4 of the Chemical Report should not be read until Lord Strachie had moved his resolution. He would like to ask the Secretary now to read that paragraph.

Sir DOUGLAS NEWTON wished to reinforce the view put forward by Colonel Courthope, that the members ought not to act with precipitancy in regard to the matter. It would be quite possible to devise a scheme by which assistance would be given to the superphosphate manufacturers, and at the same time no disadvantage accrue to the agricultural community. He did not think that they were in a position to deal with the matter until they saw the Report of the Departmental Committee.

Lord BLEDISLOE hoped that the Council would not at that stage pass such a resolution as Lord Strachie suggested. As Colonel Courthope had pointed out, the matter was now *sub judice*, and the proper way, of course, in which to express an opinion was by sending witnesses to give evidence before the Safeguarding of Industries Committee. At a subsequent stage, when the Committee's Report was available, it would still be open to the Council, if it thought fit, to pass a resolution in the terms suggested by Lord Strachie, before any action was taken. The Ministry of Agriculture had been approached with a view to their giving evidence in support of the claim of the superphosphate manufacturers; but they did not feel justified in taking any action in the matter, as obviously there was a good deal to be said on both sides. At any rate, the Ministry of Agriculture did not feel justified in appearing to take a side which might be regarded as inimical to agricultural interests.

Mr. LUDDINGTON then moved that the following minute (paragraph 4) of the Chemical Committee be added to their report:—

> "It had been reported to the Committee that Lord Strachie proposed to ask the permission of the Council on Wednesday to move a resolution to the effect that the Society is opposed to any duty being placed upon imported superphosphates. After discussion, the Committee had decided to express the view that, pending the issue of the report of the Committee which is considering this question, the Chemical Committee consider it premature to express an opinion."

Lord STRACHIE asked to be allowed to refer to what had been said by Mr. Christopher Middleton. Mr. Middleton had asked him to withdraw his motion, and at the same time had said that it was desirable that a witness should be sent to the Departmental Committee to express the views of the Council. He did not see how the Council could send any witness to express its views if it did not pass any resolution. One of his objects was to get an expression of opinion from the Council on the question whether it was or was not opposed to the proposed import duty. If it was opposed to it, then, naturally, the proper thing to do under the circumstances—and it would be desirable, no doubt, also from the Committee's point of view—would be that the Council should be represented and that evidence should be given on its behalf against the proposed import duty. That seemed to him to be very simple. On the other hand, he could not understand Sir Douglas Newton and the Parliamentary Secretary of the Ministry of Agriculture, who took the view that it was better to wait until the question was decided against agriculturists, and that then agriculturists should make their protest. Surely that was locking the stable door after the horse had been stolen. He was rather surprised at his noble friend objecting to the motion, because when the question came before the Agricultural Committee of the Somerset County Council Sir Robert Sanders, late Minister of Agriculture, got up and most strongly supported a motion similar in effect to that which he (Lord Strachie) had moved, deprecating the imposition of an import duty. He would not have taken up that attitude if he had thought that it was not a proper thing for the Ministry of Agriculture to give evidence before the Committee. He must persist in his motion because he thought that it would be very serious indeed if a great Society like the Royal did not express any opinion in regard to a matter which was of vital and grave importance to the arable farmers of this country. He must really press it, because he considered that it would put the Council in an unfavourable position if it was not to express an opinion upon it and if it was not to send a witness to give evidence before the Committee.

Mr. LUDDINGTON then moved the fourth paragraph of the Report of the Chemical Committee as an amendment to Lord Strachie's motion.

The amendment was carried with two or three dissentients.

Sir DOUGLAS NEWTON said that, arising out of the Report of the Implement Committee and the proposed sugar-beet trials, he understood that the rules governing those trials would exclude the trial of any machine not wholly made, or at any rate principally made, in this country. While, no doubt, it was a good rule to give as much preference to our own people in every way as was possible, at the same time, in the case of an entirely new development like the sugar-beet industry, for the furtherance of which there was no machinery, or practically no machinery, in this country, it seemed to him to be unwise to exclude the trial of Continental machinery. He had received a letter, a sample of many, from a farmer who said that he had heard of an implement used on the Continent for lifting sugar-beet, and that if he (Sir Douglas) knew anything about it he would like to know, if he could tell him, where it could be purchased, and the approximate price. That was the kind of letter which he was constantly getting from his farmer friends. It might be well for the Council to request the Implement Committee to consider the matter in the light of the exceptional circumstances which obtained in regard to sugar-beet lifting and topping with a view to having some classes open for Continental competition. What farmers in the Eastern counties who were going in for sugar-beet growing feared was not the preparation of the land, and was not even the singling of the crop, but it was the lifting and the topping. If the difficulty of the lifting and the topping could be got over (and they could see no way of getting over it except by the use of machinery of an improved type) a great boon would have been conferred on the unhappy arable acres of the Eastern counties. He moved that the Committee be requested to consider the desirability of having open classes in the proposed trials.

Colonel STANYFORTH said that, personally, he was very surprised, and he thought that the members of the Council would be very surprised, that Sir Douglas Newton should raise the question that day as he had done, inasmuch as it had been before the Council for about a year and a half. He (Colonel Stanyforth) had spoken about it several times at the Council. It was only at the last moment that Sir Douglas seemed to have heard anything about sugar-beet lifters. The speaker then quoted from a letter received from Sir Douglas and suggested that as a member of the Council Sir Douglas was informed of the position six or eight months ago. He might have known all about it if he had studied the work of the Implement Committee with reference to trials. The Committee had gone into the subject very thoroughly, and it was felt that the present was a time when agriculturists should try to help the English manufacturers of implements as much as they possibly could. As to it being possible to make an alteration now, he must point out that the regulations and the notices of the trials taking place had been issued for some time, and therefore the Committee could not possibly suggest any alteration in the present trials, and he did not think that the Council would suggest that it was possible to make any alteration. When it met yesterday the Committee knew that Sir Douglas was going to raise the question; but it considered that it would be quite impossible to make any alteration. He was sorry that this all-important subject should have escaped the attention of Sir Douglas before; but the position had been gone into very carefully by the Committee, and it could not suggest to the Council that it should make any alteration in the trials. In fact, he did not think that it could possibly do so.

Colonel G. L. COURTHOPE said that the Chairman of the Committee had explained that it was impracticable to make any alteration; but he would like to point out that it was undesirable to make any alteration. It was the common practice, he understood, among machinery manufacturers of all kinds for them to arrange for the manufacture of their machines, patented or otherwise, at the works, and by the operatives of machinery manufacturers in other countries in which they wanted to effect sales. Our own machinery manufacturers made such arrangements for the manufacture of their machines abroad. In connection with the industry in which both Sir Douglas Newton and he were interested arrangements were actually in operation at the present moment by which the patentees of foreign machinery, not, it was true, as far as he was aware, machinery for the lifting of the crop, but machinery for the conversion of the crop into sugar, were having machinery manufactured in this country. The machinery equipment for two factories was, within his personal knowledge, being made on the Clyde. It was of foreign design, and it was being made under foreign supervision. He wanted that same principle applied here to sugar-beet lifting machinery. If the foreign manufacturer thought that he had a machine which was better than its competitors he would wish to sell it in this country. Under existing regulations, he would have to come to an arrangement with an English machinery manufacturer to make it for him under his supervision, or else he would have to set up a factory. He (the speaker) did not mind which the foreign manufacturer did; but he was sure that it was desirable that, while sugar-beet growers wanted to get the very best machinery the world could produce for their cultivation, it should be made here. If it was made here it stood to reason that it would be much more accessible to the ordinary farmer who wanted to purchase it than it would be if he had to go and look for it in Czecho-Slovakia or some other remote corner of the earth.

Sir DOUGLAS NEWTON said that as Colonel Stanyforth had rather directed his observations at him because he had had the temerity to speak upon what he regarded as a very important point, he would like to say that he was very sorry if he had caused the Committee any trouble; but he was not a member of it, and therefore he could not have attended its meetings. Certainly he had not realised that a decision had been taken. He still adhered to his view that in a new venture like the sugar-beet industry, it was necessary to get the best machinery the world could produce to help the poor sugar-beet growers in the Eastern counties. If the limitation was going to shut out from the trials the best and most suitable machinery, then he ventured to say that the Committee was not fulfilling its primary object of doing everything possible to further the interests of the agriculturists of this country.

Sir MERRIK BURRELL moved the adoption of the report of the RESEARCH Committee. In doing so, he wished, on behalf of the Committee, to express their very sincere regret that the absence of their Chairman was due to illness. The Duke's wide experience, his quick grasp of essentials, and his power of both forming and expressing an opinion, made him an ideal chairman. Everyone on the Committee would agree that his absence from it was a very real loss. They were all glad to hear that he was now on the road to recovery. He was sure that every member of the Council would join in wishing him a rapid and complete return to his full health, and in hoping that they might soon have the pleasure of seeing him once more amongst them.

As regards the Report he had very little to say, except that he hoped that within the next month or so the Committee might be able to tell the Council something quite definite about its experiments in the feeding of bullocks. The Committee had every hope that as the result of those experiments they would be able to save the farmers of this country a very large amount of money in the fattening of cattle in the future.

On a motion from the Chair, the Seal of the Society was affixed to a request to the Bank of England that the Westminster Bank, Ltd., hold the Society's stock in 3½ per cent. Conversion Loan; and a request for the transmission of dividends on the same stock to the Society's bankers.

WEDNESDAY, MAY 27, 1925.

Sir Gilbert Greenall, Bart., C.V.O. (President), in the Chair.

Three new Governors and 100 new Members were elected.

The report of the Finance Committee was received and adopted; and, on the motion of Mr. Adeane, seconded by Mr. Ernest Mathews, it was resolved:—

> "That the Secretary be empowered to issue to any duly nominated candidate for membership of the Society, on receipt of the annual subscription, a badge admitting the candidate to the same privileges as a member during the forthcoming show at Chester, the formal election of such candidate to be considered by the Council at their next ordinary meeting."

The President thought that members would all be very gratified to know what a splendid number of entries there was for Chester. There was a record entry of cattle for the Royal. There had never been as many entered before, and it was very satisfactory.

He was pleased to be able to say that His Majesty The King would visit the Show on Wednesday, July 8th, arriving at the Royal Pavilion at 12 noon, and he hoped that as many members of the Council as could possibly do so would be there to receive him.

Mr. Davis Brown drew attention to the question of entry fees at the Show. The amount received for entrance fees for cattle was, he said, £4,700 or thereabouts. It seemed to him that the fee of £3 per animal was exceedingly heavy, and acted as a deterrent to men who were not particularly wealthy in sending what might be some of the best animals to the Show. He did not think that the Society erred on the side of liberality with regard to its prize money. If it was looked into, it would be found that the entrance fee was 20 per cent. of the first prize. He mentioned the point because he hoped that the Council might be able before another year to take into consideration the possibility of lowering the fee.

The President assured Mr. Brown that they all wished that the entry fee could be reduced, but it did not seem to be a great deterrent. It must be remembered that there was a loss on every member's entry. The stalls had to be strong and the buildings had to stand far longer than any other show's buildings, because they had to be erected so far ahead. Many of the animals came on Friday before the Show, and most of them stayed until the Monday after. They were stalled, provided with hay and straw, and given green food and everything that they possibly wanted. Under the circumstances £3 was really very cheap. What was done could not be done for the money or anything like it.

Mr. Davis Brown thought that, considering the financial position of the Society, the fee might be lowered a little.

The President replied that the Committee would see what could be done.

Mr. Mathews, in presenting the Report of the Dairy and Produce Committee, explained that the suiting that Prince Henry had been pleased to accept at the Leicester Show unfortunately turned out a little too short to make a suit of clothes, and therefore Professor Barker had to begin again. It was a most curious thing that he was unable to get any Southdown wool that was good enough after July until the spring of this year. That was the real reason of the delay, which Professor Barker had explained fully to him. However, Prince Henry, in his letter, was kind enough to say that it was quite worth waiting for.

The Secretary announced that the Trustees of the Queen Victoria Gifts Fund had decided to make a grant of £140 to the Royal Agricultural Benevolent Institution for the year 1925, to be devoted to grants of £10 each in respect of male candidates, married couples and female candidates, the actual distribution in each class to be left until after the election to pensions by the Royal Agricultural Benevolent Institution.

THURSDAY, JULY 9, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

The PRESIDENT said that, before proceeding to the ordinary business, it was with deep regret that he had to announce to the Council officially the deaths of two of their number since the last meeting. Sir Bowen Bowen-Jones joined the Society in 1867. He was the "Father" of the Council, having been elected to the Society's Governing Body in the year 1871. During the period of more than half-a-century Sir Bowen served the Society in many offices. He was a Steward of Implements from 1881 to 1883 and from 1897 to 1899; he was Steward of Forage in 1884; a Steward of Stock from 1890 to 1893; and Steward of the Agricultural Education Exhibition from its inception in 1903 till 1914. He was also one of the original Members of the National Agricultural Examination Board. In his younger days Sir Bowen took a prominent part in the work of many of the Standing Committees; but to most of those present he would probably be best remembered for his activities as Chairman for several years of the Chemical and Woburn Committee. Among Sir Bowen's contributions to the Society's Journal was an article on "Typical Farms in Cheshire" which he wrote in connection with the Society's visit to Chester in 1893. He had been elected a Vice-President in 1905, and a Trustee in 1909. He had filled the office of President in the year 1919 for the Cardiff Meeting, the first post-war Show, which would be remembered as the most successful ever held up to that time.

Mr. C. Howard Taylor, whose passing it was the President's melancholy duty also to report, had joined the Society in 1888. He had been a Member of the Council since 1918 as one of the representatives of the West Riding of Yorkshire. He had served on the Chemical and the Botanical Committees.

The PRESIDENT expressed his regret that he had been unable to attend either funeral, but he had been represented on both occasions. He was sure they all deeply regretted the loss of those two most useful members.

A vote of condolence with the bereaved families was passed by the Council, the members present rising in their places.

On the motion of the PRESIDENT, seconded by Mr. R. B. NEILSON, it was resolved:

"That the best thanks of the Society are due and are hereby tendered to:

(1) The Officials of the General Post Office for the efficient postal arrangements in connection with the Show.

(2) The Chief Commissioner of Police for the efficient services rendered by the detachment of Metropolitan Police on duty in the Showyard.

(3) The Chief Constable of Chester for the efficient Police arrangements in connection with the Show.

(4) The St. John Ambulance Brigade, No. IV District, for the efficient Ambulance arrangements in the Showyard.

(5) Messrs. Barclays Bank, Ltd., local Bankers, for the efficient services rendered by their officials.

(6) Messrs. Merryweather & Sons, Ltd., for the provision of fire protection appliances, and for the efficient arrangements made by them in connection with the Fire Station in the Showyard.

(7) Messrs. Brown & Co. (Chester), Ltd., for decorating and furnishing the Royal Pavilion and for supplying furniture for offices.

(8) Messrs. Dicksons Nurseries, Ltd., for providing Floral Decorations at Royal Pavilion."

Letters of thanks were also ordered to be sent to various individuals and firms for assistance kindly rendered, and for the loan of articles for the purposes of the Show.

The SECRETARY read a letter from the Principal of the Cheshire School of Agriculture, Reaseheath, extending to the Council and Members of the Society a cordial invitation to visit the School and the Experimental Farms attached thereto that afternoon.

Proceedings at the General Meeting of Governors and Members,

HELD IN THE LARGE TENT IN THE SHOWYARD AT CHESTER,

THURSDAY, JULY 9, 1925.

SIR GILBERT GREENALL, BART., C.V.O. (PRESIDENT), IN THE CHAIR.

President's Opening Remarks.

The PRESIDENT said that, first of all, they could congratulate themselves on the wonderful show which was being held there. They looked forward to the financial result when it was known as likely to be one of the most successful in the long history of the Society. They all remembered the serious outbreaks of foot-and-mouth disease during the last two years and that Cheshire had suffered more in this respect than other counties, in fact, the county was almost entirely denuded of its cattle. When one thought of this and the remarkable recovery made by the county in such a short space of time, it was not to be wondered at that the men of Cheshire and its adjoining counties should, under the happier circumstances existing to-day, do all in their power to make this Show a memorable one.

He must congratulate the Local Committee upon the very fine ground placed at the Society's disposal, although a special resolution of thanks would be passed a little later on in the proceedings. When he had first inspected the ground it was a series of small fields, badly drained or hardly drained at all, and those who had paid a visit to the site some year or so ago would find it hard to realise that such an admirable showyard as they saw that day could have been made. Their thanks were also due to the exhibitors of both implements and live stock, who had always stood so loyally by the Society. He realised their difficulties, their disappointments, as well as their joys, and knew from experience that attending and exhibiting at shows was not an unalloyed pleasure. That Show in all sections was an excellent one, and the number of cattle entries had created a record. (Applause.)

Without the members of the Council, however, and the Stewards, who did so much to assist in the organisation of the Show, it could not be carried out so efficiently as it was, and he would like to tender to them on behalf of Governors and Members as well as himself their united thanks.

He did not want to weary them with figures, but he would just like to remind them that the present was the third Royal Show at Chester. The first was in 1858, and probably some of them had seen a print of this Show which was held on a portion of the Roodee, covering about 25 acres. Entries of live stock were then 1,026, representing 4 breeds of cattle, 2 breeds of horses, 4 breeds of sheep and 2 breeds of pigs. The attendance was 62,539, and the financial result was a profit of £1,119, the first the Society ever made.

In 1893, when the Show again visited Chester (and he dared say there were many present who, like himself, had been present at that Show), it was held in the vicinity of Hoole on a site extending to 70 acres. The prize list provided for 11 breeds of horses, 14 breeds of cattle, 17 breeds of sheep and 6 breeds of pigs. Entries numbered 2,059. On that occasion the attendance was 115,908, and the Society added a sum of £2,404 to its account as a result of the Show.

Now in the magnificent showyard of nearly 150 acres they saw to-day, as the result of the Society's continued labours for the improvement of live stock and the help of the farmer and breeder, some 16 breeds of horses, 22 breeds of cattle, 25 breeds of sheep and 12 breeds of pigs, with a total entry of approximately 4,000, excluding poultry and small live stock.

In 1858 the total amount offered for prizes was about £1,800. In 1893 the total amount offered for prizes was £6,393. This year no less a sum than £16,411 was offered, the Society's contribution having as usual been generously augmented by the Local Committee, Breed Societies and others interested.

At the previous Chester Show Cheshire cheese was, of course, a prominent feature, and this year 295 entries had been made. Here, again, the prize fund had been increased by donations from the Local Committee and the Cheshire Cheese Federation, while two valuable gold cups had been presented by members of the Cheshire Hunt. The Cheshire Agricultural Society had, in accordance with the usual custom, withheld its county show this year, and its members had received the same privileges for the year as the members of the Royal Agricultural Society of England.

This visit of His Majesty the King on the previous day roused the enthusiasm of all who attended the show, and would contribute in a very great measure to its success. They had also received visits from many distinguished foreign and colonial agriculturists. Many of these farmed vast areas of land in the colonies, and were great breeders and importers of pedigree stock. He knew they would go away with an excellent impression of that great Show, which they would carry back to their own countries and talk about for a very long time to come.

They had also received a party of sixty South African farmers, who had expressed to him personally their great admiration of all they had seen.

He could not resume his seat without personally expressing his thanks to His Worship the Mayor of Chester, the Town Clerk, and Major Denton Clark for all the hard work they had put in for more than twelve months, which had contributed so largely in evolving their great Exhibition of all that was best in English agriculture. (Applause.)

Cups for Cheshire Cheese.

The PRESIDENT then called upon the High Sheriff of Cheshire (Major Robert Barbour) to present the two cups offered by the subscribers to the Cheshire Hunt for competition in the Cheshire cheese section.

Major BARBOUR said that, in the absence of Mr. Midwood, Master of the Hunt, he was very proud to be allowed to do this. He thanked the President and Council of the Royal Agricultural Society for allowing the presentation to take place at their annual meeting. The cup given in the competition for cheese made, owned and exhibited by any occupier of land exceeding 150 acres had been won by a very good friend of Cheshire cheese making and Cheshire hunting, Mr. Charles Parton, of Haughton, Tarporley. Mr. Parton had been "up against" tremendous opposition in the cheese tent, but the subscribers to that cup were particularly glad that it had gone to a farmer who helped hunting, and was surrounded by a good number of farmers who helped to give the Cheshire hounds some of their best runs. (Hear, hear.) The subscribers would have liked every farmer to have shared in the prize, because they did appreciate the support which the farmers gave them. The runner-up in the same section was Mr. Hesketh, of Cholmondeston, Winsford, another very good friend of Cheshire hunting. The King had accepted Mr. Parton's cheese, which had been presented to His Majesty by Mr. Rowe Morris the previous day. He (the speaker) heard Mr. and Mrs. Parton explaining to His Majesty how they had made the cheese and been so successful. In 1858 the champion cheese was given to Queen Victoria, and made by a farmer, Mr. Willis, of Ridley—who had lived very near to Mr. Parton's farm.

In presenting the Cup to Mr. and Mrs. Parton, who received it amid applause, Major BARBOUR said: "May I, as Chairman of the Cheshire Dairy Farmers' Association, ask Mr. Parton to try to console some of the disappointment of his opponents through the cup at my expense?"

The Champion Cup for cheese made, owned and exhibited by any occupier of land of 80 acres or under had been won, continued Major BARBOUR, by Mr. A. P. Sadler, son of a very good friend of the Cheshire dairying interests, Mr. James Sadler. The runner-up was Mr. West.

Mayor and Corporation Thanked.

Lieut.-Col. H. E. D. DISBROWE-WISE, in moving "That the best thanks of the Society are due and are hereby tendered to the Mayor and Corporation of Chester for their cordial reception of the Society," said that, having been privileged to accept the Mayor's lavish hospitality the previous night, he was now privileged, on behalf of the Royal Agricultural Society of England, to propose a very hearty vote of thanks to the Mayor and Corporation of Chester for making that Show the success it was. There was no doubt that it was an unqualified success. (Applause.) In his humble judgment three things had gone towards making the Show a success. The first was the visit of H.M. the King on the previous day. Chester was proverbial for its loyalty, and if any proof were wanted it was shown by the affectionate and loyal reception accorded to His Majesty by the citizens of Chester. The second was the kindness of that "fickle goddess" the weather. Many of them wanted rain, but not that week. And the third thing was the strenuous effort, the "spade work" put in by the Mayor and Corporation of Chester to help forward the great agricultural interests of this country. (Applause.) They were very deeply indebted to the Mayor for what he had done, and hoped there might not be an interval of thirty years before the Society was again invited to come to Chester. They hoped, too, that the next would be as good a Show, with an equally fine site as the present showyard, which the view of the Welsh mountains made so picturesque. (Applause.)

Lt.-Col. STANYFORTH, in seconding the resolution, endorsed every word of the proposer. He wished to say two or three words which he was afraid he forgot to say on the previous evening. He desired to draw attention to the fact that the Chester Corporation Electricity Committee had got an exhibit in the showyard demonstrating the use and application of electricity for agricultural and domestic purposes. He wanted to let everybody know that they were much indebted to that Committee for providing electric power free to the stands in the showyard. It was extremely kind and liberal on their part. (Applause.) The Electricity Committee were taking up rather a big venture with regard to supplying a large district round Chester with electricity at a low cost. It would be a great boon to farmers and others for driving machinery and lighting purposes if they availed themselves of the opportunity now offered to them by the Electricity Committee of the Corporation of Chester.

The vote of thanks to the Mayor and Corporation was heartily accorded.

The MAYOR OF CHESTER, in reply, thanked Col. Disbrowe-Wise and Col. Stanyforth for the very kind terms in which they had spoken of the efforts of the Corporation to make the show a success. It had been a great pleasure, but the pleasure had been overshadowed, in his opinion, by the great honour conferred on the city by the visit of the Royal Agricultural Society of England. In an old-fashioned way he replied: "If you are satisfied, we are gratified; if you are gratified, we are satisfied." (Applause.)

Thanks to Local Committee.

Mr. WILLIAM HARRISON said he had the honour to propose:—

> "That the best thanks of the Society are due, and are hereby tendered, to the Chester Local Committee for their exertions to promote the success of the Show."

Their President, Sir Gilbert Greenall, was also Chairman of the Executive of the Local Committee, and, while they all appreciated, he was sure, the efforts of the Local Committee, he thought that Cheshire itself had made up its mind, knowing Sir Gilbert was to be President for the year, to assist him as Chairman of the Executive of the Chester Local Committee. The amount of work that had to be done in order to get together funds to make the show a success was apparent to everyone.

There would be no doubt of the efforts of the Chester Local Committee. They were evidenced by the generous prize list that the Society were able to offer this year. It was not out of place, he thought, to say that the ex-Mayor (Mr. Alderman Cockrill) had done a great deal of spade work during his Mayoralty in connection with the efforts of the Local Committee. It was the luck of the game that generally the ex-Mayor did a great deal of the work, and the present Mayor got a great deal of the glamour. He hoped Mr. Alderman Hewitt would not mind his saying that. They all appreciated what had been done by the ex-Mayor in the year before the show took place, and they tendered their thanks to Mr. Cockrill.

The Rev. C. H. **Brocklebank** had great pleasure in seconding the resolution so ably moved by Mr. Harrison. He knew something of the work of a local committee, having served on one himself. In all modesty he would like to say that the Chester Local Committee had done their part very well.

The resolution was passed unanimously.

Alderman **Cockrill**, in replying, said the Local Committee were very pleased with the results of their labours. Last year they were plodding over that ground in top boots, and could scarcely keep their feet in them. They were very pleased that their work had been so successful. No city could have had a more loyal committee or a committee more interested in that great Society, and, on their behalf, he asked the meeting to accept their thanks for the resolution passed that day.

Railways Thanked.

Sir Merrik R. Burrell moved :—

> "That the best thanks of the Society are due, and are hereby tendered, to the railway companies for the facilities afforded by them in connection with the Show."

It was quite obvious that without the co-operation of the railways it would be impossible to collect together and disperse the enormous weight of implements for a show of that kind, let alone the vast numbers of live stock and other exhibits. They all knew that the railways were passing through very great difficulties, financial and otherwise, and the Society were extremely grateful to the companies for having granted cheaper fares for members visiting the show. A good many people, he thought, had the idea that when the Show was held it brought a great advantage to the railway companies in a financial sense. He had, however, been told that very often that was not so. The companies were put to an enormous amount of trouble, special arrangements were necessary, the work involved much shifting of staff. And at the end often there was very little profit.

Mr. **Ernest Mathews**, in seconding the motion, said that after what had fallen from Sir Merrik Burrell there remained little for him to say. He did hope that the facilities afforded by the railways in giving members reduced fares would again be granted in connection with the Society's Show to take place next year at Reading.

The resolution was unanimously passed.

Members' Suggestions.

In reply to the usual inquiry from the chair as to whether any Governor or Member had any remark to make or suggestion to offer for the Council's consideration,

A **Member** begged to suggest that at the next Show special arrangements be made so that all exhibits entered for the Society's Silver Medal for "new implements" should be shown together, in order that members of a mechanical turn of mind might have the opportunity of seeing them without travelling some eight or nine miles round the stands. He might say that every exhibitor to whom he had mentioned the proposal had heartily approved of it. He hoped, therefore, it would commend itself to the Council.

The PRESIDENT promised that the suggestion should receive consideration.

Thanks to President.

Alderman JAMES WATT (Carlisle), as one who had been referred to in the Press as the oldest exhibitor at the Show, claimed the privilege of proposing the heartiest vote of thanks to the President for his great services to the Society. It was seldom that an institution like that had at its head such an organiser as Sir Gilbert Greenall had been, so courteous, tactful and energetic. He (Mr. Watt) did not remember in all his years any other Honorary Director who had had the honour of being President once, certainly not twice. He prayed that Sir Gilbert would not be allowed to retire, for there was much more for their Society to do in the future than in the past, great as had been its achievements.

We had a Government in power which was very kind to the working man. It preferred to offer him a little gratuity weekly rather than he should do a day's work. That must come to an end before long, and the only way he could see was that as 200,000 acres of land in this country were in need of draining they should transfer the dole men to that job. They would thus provide them with work and encourage their boys to learn a trade, which they were not doing now, when their only job was to qualify for the dole. The governing body must be backed by the people themselves. There was no institution in Europe equal to the Royal Agricultural Society for power and influence, and he called upon Sir Gilbert and the Council to deal with that question as strongly and quickly as they possibly could. They might then have a larger number of acres of arable land to employ the people. (Hear, hear.) So long as they had the land lying derelict there were prospects of the stately homes of England becoming derelict unless a change of management in the country took place. It was to the landowners in the past that the agriculture of the country was indebted, and now the democratic class of people were driving them off the face of the earth. That day would be a serious one for the country when it happened. The responsibility rested upon the Society, for no agricultural institution had the same power and influence, and there was no better organiser than Sir Gilbert. "May I ask you," added Mr. Watt, "to put your back into this question and help the country?"

In conclusion, he offered the President the thanks of 15,000 members and a whole host of exhibitors, many of whom had requested him to propose that vote of thanks, and to ask Sir Gilbert to continue in office for at least another ten years.

The resolution, having been seconded by Mr. JONAS, was put to the meeting and enthusiastically carried.

Sir GILBERT GREENALL thanked the meeting most sincerely for the very enthusiastic way in which they had passed that resolution. He thanked Alderman Watt and Mr. Jonas for the very kind things they had said, and expressed to the members present his great appreciation at being made their President for the second time. He had done all he could during the years he had been Honorary Director to push forward the interests of the Society and make the Show what it ought to be—*the* greatest show in the country. He thought they would all agree that the Show in the last twenty years had improved, and things were very different from what they were in the early days when the Show went to Derby. He had had the loyal support of everybody on the Council. When the

Society in 1906 went back to the country everyone—including those who were in favour of the permanent showyard—made up his mind to make the Show a success. It would be impossible for any one man to run the Show, and he had been fortunate in having the co-operation of an excellent body of stewards, some of whom had acted ever since the 1906 Show at Derby.

Regarding the future, Sir Gilbert said if any younger man came along —he himself was nearly sixty, though he might not look it—he would be ready to give up the Honorary Directorship. (Cries of "No, no.") But as long as he was able and the Society so desired he would be quite happy to continue to do his best for them.

He was afraid the task Mr. Watt had put before him was rather a large one. It would, he thought, take a better man than he to reform the country. He agreed with Mr. Watt that a great many people who called themselves working men did not work as hard as those who were not so called.

It was a difficult thing, owing to the dole, to get men back to work. As far as he could see, the only thing some of them thought of was drawing the dole and riding about in charabancs. The dole system would have to come to an end, and the sooner that happened the better it would be for the country.

Once again he thanked the members for their kindness and courtesy to him, not only that day, but on every occasion when they met together.

WEDNESDAY, JULY 29, 1925.

Sir Gilbert Greenall, Bart., C.V.O. (President), in the Chair.

The Secretary read the following letter:—

> Buckingham Palace,
> July 9.
>
> Dear Sir Gilbert,—The King wishes me to let you know how much he enjoyed his day at the Royal Agricultural Society Show yesterday, and to thank you for all the trouble taken by you to make the visit a success. His Majesty congratulates you on the excellence of all your arrangements throughout the day.
>
> The King was glad to be able to attend the Show during the year of your Presidency, and hopes that the attendances during the week will be all that you desire.
>
> Yours sincerely,
> (Signed) A. H. L. Hardinge.

Seven new Governors and 310 new Members were elected.

Mr. Adeane, in presenting the Report of the Finance Committee, which was received and adopted, said he was afraid that he had no information to give the Council with regard to the result of the Show at Chester. If there was a profit it was a very small one, and he hoped, if there was a loss, that also would be a very small one.

It was resolved, on the motion of Mr. Adeane:—

> "That, in order to facilitate the winding-up of the accounts for the Chester Show as early as possible, authority be given for the issue during the recess of orders on the Society's Bankers for the payment of accounts connected with the Show."

Colonel Cornwallis, in presenting the Report of the Journal and Education Committee, said that the position with regard to the National Diploma Examination came before the Committee for discussion on the previous day. The decision in the matter, if any change was hereafter contemplated, rested, as the members of the Council knew, with the Joint Board of the Royal and the Highland Societies. It would, therefore, be premature to bring forward any recommendation to the Council at the present time. If material changes were later on contemplated they would be reported to the Council in due course.

The Report of the Judges Selection Committee, containing a report from the Sub-Committee on the question of the continuance or otherwise of the system of appointing Assistant Judges, was presented. Expressions of opinion had been given in Committee, both in favour of and against the continuance of the system. Eventually it had been decided by the Committee to submit the Report in full to the Council, and take a vote of the Members present upon the two alternative systems mentioned in the report.

The PRESIDENT said that he did not intend to try to influence the decision of the Council, and he was quite prepared to take a vote for the purpose of deciding which system should be adopted, as he considered that it would be a pity to divide the Council very seriously on the matter. He thought that if he put the proposal to adopt the Single Judge system it would go through. He wanted it to be very clearly understood that the Assistant Judge system had not in the least failed at Chester. There had been no complaints. Not a single judge could say that it had failed. One or two judges had said that they preferred the other system; but nobody said that the Assistant Judge system adopted at Chester was a failure. However, if it was not generally liked, the best thing, he thought, would be to revert to the Single Judge system. He felt that that was the only possible way out of the difficulty. It would be seen that the Committee recommended that in the larger sections there should be two judges, so as not to overtax the judges. The Committee would decide, later on, which sections they considered required two judges. He thought that if he put the Single Judge system as an amendment to the present system it would go through unanimously.

A show of hands was taken, and it was agreed by 23 votes to 4 that the Single Judge system should be adopted.

The PRESIDENT said that he had every sympathy with the minority; but he thought that it was wiser to have the Single Judge system if there was any deep feeling on the matter.

In presenting the Report of the IMPLEMENT Committee, Colonel STANYFORTH said he was afraid that he would have to ask the Council to consider one clause that rather involved a principle. Members would hear, when the report of the Committee of Selection and General Purposes was read, that the date of the Reading Show had been fixed for the same week as that during which the Show was held at Chester this year. The members were aware that the date this year and the date next year were an alteration of the Society's usual dates. As the report of the Implement Committee stated, the feelings of implement makers were very strong with regard to the change of date, inasmuch as the Highland Society's Show was always in the third week in July. That meant, of course, that there were practically only about two days for the implement makers to remove their implements from one show to the other. A very great number of implement makers wished to show at the Highland Show as well as at the Royal, and it was said that the present arrangement as to dates made it practically impossible for them to do so. It meant very much more expense to them, because they would have to have duplicates of the machinery they were showing. It also involved very great inconvenience to them. They hoped that the Council would be able to fix permanently the date of the Royal Show.

Mr. AVELING having put the case on behalf of his colleagues, the Agricultural Engineers, the PRESIDENT said he quite agreed that the Society ought to fix the date of the Show as far as possible; but, if the date was fixed as suggested, the Society would find some day when it went to some town that it would have to alter it. Those who knew the difficulty of getting places to take the Show would realise that when a town said that it was impossible to have the Show in a certain week, it was not possible to go there in that week. Newcastle would not have the Show during the Gosforth Park meeting. Cambridge would not have the Show during Newmarket week. Nine times out of ten it would be found that the week fixed for this year was an open week. It would not be possible to revert to the old week for Reading, because that would involve clashing with Henley. Whatever time was satisfactory, it would be found that it was impossible to adhere to it invariably. It was very difficult to get a place to take the Show, and it was necessary to fall in with local arrangements. He considered that by far the best was the week fixed for the Chester Show. It made absolutely no difference to him personally, and he had no feeling in the matter. He thought that it was the freest week of the two from an agricultural point of view.

After some further discussion, the Secretary was instructed to communicate with the Highland Society as to the dates fixed for next year's Show. The question of fixing permanently the dates of future shows was deferred.

The Report of the COMMITTEE OF SELECTION AND GENERAL PURPOSES was received and adopted, including a recommendation that Lt.-Col. E. W. Stanyforth be elected a Trustee, and Mr. William Harrison a Vice-President.

The RESEARCH Committee's Report having been presented, Lord BLEDISLOE said that there was a conversation at the meeting of the Committee on the previous day in reference to the proposed future scope of the work of the Committee, and particularly as to whether it would be advisable for the Committee to turn its attention to the collation of the up-to-date research work of the different research stations, and the dissemination in popular and intelligible language of the more valuable results of such research work to farmers throughout the country. If he might be allowed to say so, the Ministry of Agriculture recognised the very valuable work which the Society was doing in the matter of research and experiment, particularly in the matter of carrying out field experiments by way of confirmation and demonstration of the more limited experiments which were carried out at the research stations. The other work which was now contemplated was work which, in fact, to be quite frank, was not being sufficiently carried out at the present time, and which was intended to be, at one time at any rate, part of the work of the Ministry. He wanted to suggest on behalf of the Ministry that it might be advisable, if the Research Committee, or any committee appointed from their number, or any committee that the Council chose to appoint instead, conferred with the Ministry on the subject, in order, if possible, to avoid overlapping, and in order, if possible, to agree with the Ministry what was the most useful scope of work in that connection that the Society could carry out. He, personally, held rather strong views on the subject. He would like to see the respective spheres of the Ministry and the Royal Agricultural Society, the premier agricultural society of England, so delimited as to enable the Society to carry through this most valuable work without interference from the Ministry of Agriculture in the future, whoever might be those who for the time being were serving that Department. He might incidentally mention, as he had had occasion to mention to Sir Daniel Hall that morning, that a great deal of the value of the scientific work which was passing from the Danish Ministry of Agriculture to Danish farmers, and of which so much was heard, was due to the fact that the Danish Agricultural Society, which resembled in Denmark the Royal Agricultural Society in this country, was in fact the channel for the communication and interpretation of the work of the State research stations for the benefit of the farmers. It might be useful to appoint some committee, or to appoint the Research Committee, to confer with the Ministry of Agriculture on the matter with a view to avoiding overlapping and to strengthen the hands of the Society in respect of research and experimental work.

Mr. ADEANE said that he had no right to speak for the Research Committee, and he very much regretted that Sir Merrik Burrell was not present at the Council meeting. Unfortunately, the Finance Committee sat at exactly the same hour as the Research Committee, and he was able to attend only the end of the meeting of the Research Committee, and therefore it was a little difficult for him to follow the proceedings. But he was quite sure that the Research Committee would welcome a conference with the Ministry of Agriculture on the question. He would like to move that the Sub-Committee, which had already been appointed to go into the matter of collating research work, the sub-committee of the Research Committee, which consisted of Sir Merrik Burrell, Lord Bledisloe, Mr. Dampier Whetham and Mr. Orwin, be asked to confer with the Ministry.

Lord BLEDISLOE asked that his name might be omitted.

Mr. ADEANE then proposed that the name of Mr. Evens should be substituted for that of Lord Bledisloe.

The motion was carried and the Report was adopted.

On the motion of the PRESIDENT, the Seal of the Society was affixed to a transfer form for the purchase of £317 *5s. 2d.* Metropolitan Water Board 3 per cent. Stock in connection with the Gilbey Bequest.

WEDNESDAY, NOVEMBER 4, 1925.

Sir GILBERT GREENALL, Bart., C.V.O. (President), in the Chair.

Seventeen new Members were elected.

Mr. ADEANE, in presenting the Report of the FINANCE Committee, said that the only thing of importance in it was the report of the sub-committee which was appointed by the Council on July 29 to consider the question of the appointment of professional accountants and also the whole of the administration of the office. He thought that the recommendations made by the Finance Committee had been very fully dealt with in the report which had just been read. The work of the Society had increased enormously in every direction during the last ten years, and it was undoubtedly necessary that the staff should be increased. The accountants' and auditors' work had also increased, and he was afraid that their work would cost the Society more in the future. He considered that altogether in a full year the increased expenditure under that head would be about £800. With regard to paragraph 5 of the report, the profit on the show at Chester would, he thought, amount to about £350.

In presenting a Report from the ORCHARDS AND FRUIT PLANTATIONS Committee—which was adopted—Colonel WHEELER said that the Federation of British Growers, who had been co-operating with the Society for the last four years in running the competitions, had now been amalgamated with the National Farmers' Union. The members of the Orchards and Fruit Plantations Committee hoped that the Farmers' Union, through its Fruit and Vegetable Committee, would continue to render the same help as the Federation of British Growers had rendered hitherto.

In moving the adoption of the Report of the VETERINARY Committee, the EARL OF NORTHBROOK said that there were two matters upon which he wished to say a few words. The first was on the question of the new Draft Order dealing with Sheep Scab. He fancied that most of the members of the Council were acquainted with the provisions of that Draft Order, because an explanatory letter had been circulated to all Local Authorities throughout the country for their observations, and it had also been sent to agricultural societies. Briefly, the reason for the introduction of the Order was that the Ministry admitted the failure of the Order of 1923. That Order embodied a principle that had the support of a considerable number of members of the Council, namely, the placing upon sheep-owners of the onus of taking all reasonable steps to keep their sheep free from scab. No doubt that principle was a very excellent one. The observation of the Ministry in its explanatory letter was that it had not been found practicable to enforce the Order effectively. It was upon that ground that it was now proposed to revoke the Order and to substitute the provisions of the new Draft Order that had been circulated. One of the main features of the new Order was that there was to be a general dipping of sheep throughout the whole country during a period of six weeks towards the end of the year. The date suggested by the Draft Order was from July 15 to August 31. During that period no sheep could be moved from one geographical county to another unless accompanied by a certificate that they had been double-dipped. During the rest of the year the country would be free from all restrictions as to dipping and as to movement. There was also a provision in the Draft Order which would enable local authorities, subject to report to the Ministry, to exempt from double-dipping sheep that were intended for exhibition. Any county that had for two years been free from sheep scab would be exempted from the double-dipping Order. It was proposed that the new Order should come into operation on April 1, 1926. Judging from the Report of Sir John McFadyean, which had been read, the present position in regard to sheep scab in this country was exceedingly unsatisfactory. In spite of the efforts that had been made during the past five or six years to deal with it, there had been rather more outbreaks during the present year than there were last year. What was more alarming was the very wide prevalence of the disease. There had been thirty-nine outbreaks, and there were no less than eighteen or nineteen counties in which the disease existed. The Society had so often pressed the Ministry to take steps to eradicate sheep scab, and had so often urged the possibility of its being eradicated by means of more stringent Orders, that he hoped members would welcome the present serious attempt on the part of the Ministry to adopt more energetic methods. The Order had been very carefully considered and discussed by the Committee. Minor criticisms had been made on one or two points. One point made was that the period suggested by the Ministry, namely, the period from July 15 to August 31, was not a very convenient one in many districts. But it was not possible to fix a period of six weeks which would suit flock-owners throughout the whole country, because conditions varied so much. The Committee thought that on the whole it was better not to take the responsibility of recommending an alteration in the date, and that the best course to adopt was not to make any minor criticisms, but to accept the general principles of the Order and give it a fair chance and see what effect it had. The Ministry pointed out in its explanatory letter which accompanied the Order that, as members knew from their past experience, whether the new policy would succeed or not depended entirely on whether it was possible to get the Local Authorities to enforce it effectively. As the Society had pointed out to the Ministry on several occasions, the real reason why the Orders made by the Ministry had not been effective was that in certain hill districts, such as Wales and Derbyshire, the difficulties were extremely great. Still the Local Authorities had not taken adequate steps to enforce the Orders, and when the Orders had been broken magistrates had exercised extreme leniency in dealing with the culprits. Unless great activity was shown by the Local Authorities in enforcing the Order, agriculturists, he was afraid, could not hope for the success of it. The conclusion which the Committee had arrived at was that the best course that it could take was to advise the Council to express its approval of the Order as it now stood.

The other matter to which he wished to refer was the question of foot-and-mouth disease. Of course it was a very great disappointment to see the recrudescence of that disease in this country. The Minister of Agriculture, speaking at the Council of Agriculture a short time ago, referred to the matter. There was one point which he emphasised. He (Lord Northbrook) would like to call the attention of the Council to it, in the hope that in consequence it would receive greater publicity. Mr. Wood said that, while he did not think, as far as his advice went, the situation was one in which they were called upon to be alarmists, it was undoubtedly grave, and he wished to emphasise the imperative necessity on the part of farmers of quick reporting. The organisation of the Ministry was much in the position of a fire brigade: they could not begin operating until they received the signal. If the signal was promptly given the fire could be suppressed; but if it was held up it could be suppressed only with great difficulty and damage, and there were still farmers who delayed in reporting. When the inspectors of the Ministry were tracing animals from an infected market during the past fortnight they found infected animals on farms which were visited, the owners of which had been very slow indeed to report suspicious symptoms, and he asked for the co-operation of the farmer in reporting suspicious cases. The real danger of the matter was in the markets. He (Lord Northbrook) thought that that was perfectly true. There was very good reason for thinking that a recent outbreak in one of the localities in which outbreaks had taken place was entirely due to animals which the inspectors found had been on the farm for a very considerable period after they were infected with the disease. He was sorry to say that it had been known to be the fact that when an owner had found symptoms or had been suspicious as to the health of his cattle he had taken the precaution of getting rid of them by sending them to the local market and so getting them distributed over the country.

Mr. Alfred Mansell said that he would like to move a resolution to the effect:—

> "That the Council should urge upon the Ministry of Agriculture the desirability of taking effective steps to prevent goods coming into this country packed in hay and straw."

He was told that that would be impossible; but he thought that nothing in this world was impossible. Considering the great amount which this country had at stake, he did not see why it should not do as Canada did and insist that if goods come here they should come in wood-wool or in some preparation of paper. He believed that the Ministry had recommended that hay and straw packing should be burnt; but he knew that it was not burnt. He saw some stuff being unloaded in his own town only the other day. A farmer's cart came along and picked up the straw and took it away into the country. What more fruitful source for the introduction of foot-and-mouth disease could there be? The Continent was simply rife with the disease. He had not spoken to Lord Northbrook on the subject; but he hoped that the Council would accept the resolution.

Mr. Christopher Middleton seconded the resolution. He wondered whether Mr. Mansell would expand the resolution and ask for the prohibition of the sale by auction in local cattle markets of all imported fruit and other trees. He thought that there was a very great danger indeed involved in such sale, which was very common.

Mr. Mansell agreed with the suggestion made by Mr. Middleton.

Sir Merrik Burrell said that Lord Northbrook had asked him to say a word on the subject. A month ago, the Advisory Committee to the Minister asked for a full report to be laid before them, setting out all the possible avenues of attack, controllable and uncontrollable, by which the disease might come, with suggestions from the Minister's veterinary staff as to how those avenues might be blocked. A memorandum had been circulated among the members of the Advisory Committee, and it would come up for discussion that afternoon. All the points that had been raised at the present meeting were naturally under consideration. The Ministry was very much alive to the desirability of dealing with those matters if means could be found. He did not think that he was revealing anything confidential in saying that the difficulty in dealing with the traffic from the Continent to this country lay chiefly in the fact that its volume was so vast. Other countries had been able to deal with straw and hay and other things; but, when the enormous amount of imports coming into this country had to be dealt with, the matter was a very much more difficult one. He could assure the Council that the Ministry had the will, if effect could be given to anything in the direction suggested. Whether it was worth while to pass resolutions he was prepared to leave to the Council; but he could assure the Council that the matter would receive very careful attention within the course of two or three hours.

Mr. R. G. PATTERSON said that the suggestions which had been made for preventing the importation of the disease were very valuable; but the disease existed in this country, and the question was how it was to be stopped as quickly as possible. Having regard to the remarks of the Minister quoted by Lord Northbrook, he was bound to say that the danger was in the markets, and he thought that measures should be taken to deal with that danger. He was convinced that a great number of the outbreaks were due to the distribution of stock which had been through an infected market. He thought that the time had come when it was urgent that all markets should be closed except for the sale of fat stock, and that the movement of store stock should be allowed only under licence. There had been several instances where the very strong suspicion that individuals having ailing animals on their farms had sent them to the nearest auctions had been justified. It was all very well to restrict those auctions; but if cattle had to travel on the roads, dairy stock and other stock crossing those roads to their pastures were very apt to pick up the disease. He was not sure that the Council would not be well advised in recommending the Ministry to consider seriously the question of closing markets. Reference had been made to the importation of the disease through hay and straw packing and that sort of thing; but there was grave danger in another direction. The disease might be imported by means of the bags in which potatoes came from the Continent. He had had such bags on his own farm unknowingly. He had not known about it till afterwards. Imported potatoes had been sent to dealers in his own town, and the bags had been sent to him to load potatoes to go back to the dealers. There was a very grave danger there. He did not see how the importation of everything of that description could be prevented; but there was no reason at all why the Council should not pass a resolution to the effect that the most stringent steps should be taken to limit the danger in that direction as far as it was possible to do so.

Mr. BURKITT supported what Mr. Patterson had said. At the meeting of the Diseases of Animals Committee in his county the question of the danger through the materials which had been mentioned being disseminated by means of motor vehicles was brought up. Newcastle was a great port for the introduction of potatoes. In his own district potatoes had been sent by motor-lorries and wagons, which afterwards went to the farms carrying cake, meal, and so on. That was a source of infection. His committee had drawn the attention of the Ministry to it.

Some further discussion ensued as to the exact wording of the resolution.

Lord NORTHBROOK considered what was proposed was really rather forcing an open door. They knew, from what Sir Merrik Burrell had said, that the Ministry had the matter very seriously under consideration. They were making enquiries as to all possible sources of infection, with a view to finding the best way of making the importation of the things safe, or prohibiting them. They were considering the possible prohibition of the importation of any shrubs or trees. He would be very sorry to commit himself to the opinion that the hay and straw used in packing were the most fruitful sources of infection.

The resolution, in the following terms, was then carried, and ordered to be sent to the Minister of Agriculture:—

"That this Council urges upon the Ministry of Agriculture the necessity of taking effective steps to prevent importation into this country of goods packed in hay, straw, and other materials of a similar kind which may be a source of infection, and that they prohibit the sale of foreign fruit, forest, rose and other trees in local markets."

Mr. PATTERSON then moved and Mr. EVENS seconded a resolution to the following effect :—

> "That the time has arrived when the Ministry of Agriculture should consider the question of the closing of store stock markets and the stoppage of movement of all stock except under licence."

This motion, after adverse criticism by Sir MERRIK BURRELL, the Hon. E. G. STRUTT and Mr. BURKITT, was put to the meeting, but, on a show of hands, was negatived.

In presenting the Report of the SELECTION AND GENERAL PURPOSES Committee, the Hon. CECIL PARKER said it gave him great pleasure to move that Lord Desborough be nominated as President for 1926.

Sir WILLIAM MOUNT asked to be allowed, as one of the representatives of Berkshire, to second the nomination of Lord Desborough as President for the ensuing year. He was quite sure that the counties of Berkshire, Buckinghamshire and Oxfordshire would be extremely gratified to know that in the year in which the show was to be held at Reading they would have someone so well known and respected as Lord Desborough as President. He could assure Lord Desborough, on behalf of the Local Committee, that it would give him every support and all the co-operation possible.

Lord DESBOROUGH said that he was very grateful to that very distinguished Society and to its still more distinguished Council for the very great honour that it had done him in putting forward his name as President for the next year. He could only hope that, with the great help and knowledge of the present President, and of the Secretary, who would obviously do most of the work, the Reading Show would be a very great success and would be worthy of the Society.

Sir MERRIK BURRELL, in moving the adoption of the RESEARCH Committee's Report, said that the experiments in the drying of whey were now nearing completion. The Committee considered that the small sum which it had allocated for the continuance of the work next year would be well spent, and that some really definite conclusions would be arrived at as to the best method of drying whey, both on a large scale and on a small scale. The results that had already been arrived at would no doubt have been put into more practical use before now but for the fact that just when they were arrived at the supply of whey almost entirely failed. That was due to two things, he thought. One was that the alteration in the milk prices caused very much less summer milk to be produced and more winter milk. Therefore there was not so much cheese-making in the country, and consequently there was very little whey available. The other was that one of the cheese-making areas in Cheshire was stopped entirely through its cattle being killed. The lucerne inoculation experiments were going on. Last week he saw Sir John Russell, who told him that the results in some parts of the country were most promising, and that it looked as though, through careful inoculation, areas in Great Britain that up till now had been quite incapable of growing lucerne would now be able to grow it quite successfully. There would have been better results shown if the sowing season this year had not been so difficult. Members of the Council would remember that May had nearly double the average rainfall, and that it was immediately followed by a very severe drought, which lasted for several weeks. That made the getting of a good tilth impossible. The experiments on the winter feeding of bullocks conducted in Norfolk promised, he thought, to show quite valuable results ; but it would be premature and possibly misleading to issue any results until the experiments which were to be conducted in the coming winter were complete.

The Council would remember that it voted the Research Committee £2,000 last year, and that the Committee was authorised to spend up to that amount this year, if it found it necessary. He was glad to be able to report that the Committee had been able to carry on all the experiments which it had in hand, and would be able to meet all outstanding liabilities with an outlay of about £1,000.

The Report of the Council to the Annual General Meeting of Governors and Members, to be held at the Royal Agricultural Hall, Islington, at 2.30 p.m. on Wednesday, December 9th, was prepared and ordered to be issued.

WEDNESDAY, DECEMBER 9, 1925.

SIR GILBERT GREENALL, Bart, C.V.O. (President), in the Chair.

The PRESIDENT said that since their last meeting a sad bereavement had befallen the Royal Family. It would, he knew, be the wish of all in that room that the Council should place on record their sense of sorrow for the death of Queen Alexandra, and humbly express their respectful sympathy with their Majesties the King and the Queen in the melancholy circumstance which had caused such universal sorrow. He begged to move the following resolution:—

> The Council of the Royal Agricultural Society of England, on behalf of the Governors and Members of the Society, desire to express to His Majesty the King their respectful and sincere sympathy in the grievous loss which has befallen the Royal House by the passing of Her Majesty Queen Alexandra.

Members present signified their assent by rising in their places.

One new Governor and 17 new Members were elected.

Mr. ADEANE, in presenting the Report of the FINANCE Committee, dealt with the Chester Show accounts, all the details of which were in the hands of members of the Council. In the statement the corresponding figures for last year were given, so that members would be able to make a comparison. He need therefore give very few figures. The Show at Chester realised a surplus of £345, against a loss at Leicester of £5,976. There were increased receipts under the head of Entries of Live Stock of £1,302, Admissions to Showyard of £5,072, and Garage Receipts of £948. The principal increase on the other side was under the head of Prizes, which showed an increase of £1,496. The total receipts were £58,414, against an expenditure of £58,069.

He thought that it would be interesting for the members of the Council to go back twenty years to the Show at Derby, which was the first Show held after the Society left Park Royal, and to compare the figures of the Chester Show with those at Derby in 1906. At Derby the receipts amounted to £22,879. At Chester the receipts amounted to £58,414. The expenditure at Derby was £20,850, against an expenditure at Chester of £58,069. He was sure they would all agree that the Show at Chester was in every way worthy, not only of the Society, but of the county in which it was held. The thanks of the Council were very much due to the Mayor and Corporation for the hospitable manner in which they received the Society, to the Local Committee for the arrangements they made and their handsome contribution to the local fund, which he believed exceeded all records, and also to the Stewards. The thanks of the Council were especially due to Sir Gilbert Greenall, who for the second time had performed the functions of President and Honorary Director at the same time. He was sure that they were all exceedingly grateful to Sir Gilbert for performing those two functions, as he had done, with grace and ability. He had given satisfaction to all.

In presenting the Report of the VETERINARY Committee, the EARL OF NORTHBROOK made reference to the paragraph in it dealing with the communication received from the Warwickshire County Council, which suggested that the risk of the spread of foot-and-mouth disease would be lessened by a universal regulation requiring a few days' detention of all cattle, except, of course, in the case of fat cattle for slaughter, between exposure at one market and exposure at the next. He thought it was generally agreed that in many cases foot-and-mouth disease had been disseminated through the country by dealers who had sent animals to one market and then passed them on directly to other markets in the country. The Committee, therefore, considered that it was desirable that the suggestion of the Warwickshire County Council should be brought before the Minister for consideration, and that if, as he hoped it would, the Council agreed with the Committee that it was a desirable course to take, and would express its approval of it at the present meeting, a letter should be sent that morning to the Minister of Agriculture so that the matter could be raised at the Minister's Advisory Committee when it met at four o'clock that afternoon.

The PRESIDENT said they had to welcome the following newly-elected Members of Council who were present that day for the first time:—Sir Archibald Weigall, Major Robert Barbour, Mr. J. Herbert Hall, Mr. Windham E. Hale and Mr. James Piper.

Sir MERRIK BURRELL, in the absence of the Duke of Devonshire, moved the adoption of the RESEARCH Committee's report. In doing so, he said that the only thing to which he need call the attention of the Council in connection with the work of the Research Committee was the fact that a very confusing situation had arisen over the growing of some of the Plumage Archer type of barley, over which the Research Committee spent a good deal of time and trouble and a certain amount of money, with a view to bringing it to the notice of members of the Society last year. In 1923 those barleys were grown at the Norfolk Agricultural Station and met with very great approval. The Committee was urged to make those barleys more generally known amongst the members of the Society. They proceeded to have them grown in all the various counties in England where barleys were successfully grown, in order to ascertain whether they could be equally well grown all over England, as well as in Norfolk. It proved to be the case that they could be grown. This year a good many people were encouraged to grow them in consequence of the Society having rather advertised them; but, when it came to selling them, the maltsters to all intents and purposes declined to buy them. That involved a complete turn round on the situation in 1923. He had been informed by a very eminent gentleman that he did not believe that the present situation need have arisen, and that it was due more to prejudice than to the fact that the barleys were not fit for malting. Whether that was so or not, he did not know; but the Committee had asked Mr. Evens to be so kind as to attend a conference at the Brewers' Institute about a month ago to see whether he could ascertain what the true facts of the case were. He, no doubt, would like to tell the Council what happened at that Conference. Mr. Evens had not been able to get any definite statement from the brewers as to why they had only been offering somewhere about 35*s*. to 40*s*. for barleys of the Plumage Archer type, whereas they had been giving up to as much as 75*s*. for barleys of the Chevallier type. The Committee felt that it was a matter of very great importance to barley-growers that the matter should be cleared up, and that the best possible information should be given to the members on the subject. The Research Committee, therefore, decided on the previous day to write a letter to the Brewers' Institute asking them whether they could give the Committee some real reason why there was such an extraordinary difference between the prices for the two different types of barley, seeing that the samples which they had been offered were samples in sound condition.

Mr. JOHN EVENS said that he attended the Conference at the Brewers' Hall on November 5. He came to the conclusion that it was a Conference for brewing and malting, dealing with the chemical composition of malt, and so on, rather than dealing with the matter from the farmer's point of view. He told the Conference that the Research Committee had been conducting experiments at the Norfolk Agricultural Station with Plumage Archer and Beaven's Improved Archer barley, and that it had sent them out to nine different centres in England to be grown. It was said two years ago that that class of barley had been the salvation of Norfolk, and he believed it; but he had to confess that it had not succeeded very well in several places to which it was sent last year. He asked the Conference for an explanation, but he was sorry to say that he could not get one. At the meeting of the Research Committee on the previous day, it was decided that a letter should be written to the Secretary of the Institute of Brewing, as the Committee thought that it would then possibly get a definite reply. As he had said, the Conference seemed to him to deal more with plant breeding and experiments on barley after the breeding of different varieties than with their growth by the farmer. The Conference asked that the Society, if it undertook any further experiments with barley, would report to it.

Sir **Douglas Newton** said that he would like the sanction of the President to refer to another matter which, he thought, was of some importance and substance, namely, the question of the provision of power alcohol from beet and potatoes. If he heard aright, he understood that the Research Committee had had the matter referred to them, and had decided to let the papers and the matter generally lie on the table. He did not know whether that meant the death of the matter so far as the Society was concerned, or whether any further action would be taken. He would like to suggest, with all respect to the members of the Committee and to the Council, that, if it did mean the death of the matter, they should not too hurriedly bury this new development and dispose of it too lightheartedly. There were many in that room who had travelled abroad and who had been struck, as he had recently been in Jugoslavia and other parts of Central Europe, by the great number of distilleries which were everywhere distributed throughout the country. Not only did they distil alcohol commercially and successfully all over the country by means of big distilleries costing some £20,000 to £30,000 apiece, but the peasants also had their own distilleries, which were quite small, but which were found to be most useful in using up waste fruit and potatoes. He thought that it would not be wise for the Council to dispose of the question on the advice of, perhaps, one or two people who had looked into the matter, when they could see with their own eyes the great object-lesson abroad of the successful development of that side of the industry. Certainly something was needed for the arable land of this country. While the big sugar-beet factories could draw upon the reserves which they had in the big acreages which surrounded them, there was plenty of room for distilleries in the valleys, where there was only a limited area of arable land. It would be quite uneconomical to send the sugar-beet to factories some fifty or sixty miles away. Therefore he would ask the Research Committee not to bury the question altogether, but to look at it and consider it thoroughly before it disposed of it, seeing that there was evidence elsewhere of the successful working of the industry.

The **President** said he was sure that the Research Committee would do what Sir Douglas Newton suggested.

Sir **Merrik Burrell** said that the Research Committee, at its meeting on the previous day, was very far from wishing to bury the question. The reason why it did not take any active steps in the matter was because the members, perhaps through their stupidity, failed to see quite how it concerned the Committee. If they had been asked to conduct experiments to find out which was the kind of beet which would produce the best or the most alcohol, they would have been able to see that they had something to do with the matter. It was well known that it was possible to produce alcohol from sugar beet or potatoes or from any other vegetable matter, or even from wood. It seemed to him that it was for the Government to decide whether it was prepared to subsidise the makers of alcohol in the way proposed. He imagined that upon that subject other Government Departments might have a good deal to say. The subject was a very wide and intricate one, and the Research Committee really felt that it was outside the scope of its work. It fully realised that it might be of the greatest value to districts where only a small area of land was available for sugar-beet growing to have a distillery in its neighbourhood. He understood that it only took about 2,000 to 3,000 acres of land to keep a distillery supplied, whereas it took about 10,000 acres to keep a sugar-beet factory supplied. It was not a matter of sugar beet only. All manner of things were used.

The following Standing Committees were appointed for 1926:—Finance, Journal and Education, Chemical, Botanical and Zoological, Veterinary, General Show, Stock Prizes, Judges Selection, Implement, Showyard Works, Selection and General Purposes, Dairy and Produce, Horticultural, and Research.

On the recommendation of the Committee of Selection, the present members of the various Standing Committees were (with some exceptions) reappointed to those Committees. Mr. W. Burkitt was added to the Journal and Education, and Dairy and Produce Committees; Sir Arthur Hazlerigg, Prof. W. Somerville and Mr. Dampier Whetham to the Journal and Education Committee; and Mr. T. W. Ashton to the Botanical and Zoological Committee.

On the motion of the PRESIDENT, the Seal of the Society was ordered to be affixed to the Agreement with the Corporation of Newport, Monmouthshire, relating to the Show of 1927.

Sir DOUGLAS NEWTON asked whether the Chairman could give the members any information regarding the result of the case which, he understood, was tried on the previous afternoon respecting the selling of foreign apples which were tainted with arsenic. From the British growers' point of view it was rather a serious matter that there should be imported from abroad apples which had been heavily sprayed with arsenic when they were practically fit for market. In a case tried the other day the apples when tested showed one-tenth of a grain of arsenic, quite enough to be very unpleasant if one ate two or three apples. It could not, he thought, be too widely known that the English fruit-growers did not spray apples when ripe and ready for market with poisonous arsenic. He hoped that the matter might be kept before the Council, because it was very deleterious to the interests of British fruit-growers that it should get abroad that English apples were unsafe food.

The PRESIDENT said that he had not seen any reference to the matter.

Proceedings at the Annual General Meeting of Governors and Members,

HELD AT THE ROYAL AGRICULTURAL HALL, ISLINGTON,

WEDNESDAY, DECEMBER 9, 1925.

SIR GILBERT GREENALL, BART., C.V.O. (PRESIDENT), IN THE CHAIR.

President's Opening Remarks.

The PRESIDENT, in opening the meeting, said it was with great pleasure that he presided that day at the Annual General Meeting of the governors and members of the Royal Agricultural Society of England, and it was his duty at once to express their thanks to the Royal Agricultural Hall Company and to the Smithfield Club for the use of this Club Room for the meeting.

When he was elected a year ago in that room he said he would endeavour to fill the dual rôle of President and Honorary Director to the utmost of his capacity, and, now that his year of office as President had ended, he trusted he had in some measure succeeded. (Applause.) To the members of Council, governors and ordinary members of the Society he had to express his thanks for the great support they had given to him during the year, for without that support it would have been impossible to carry on any department of the Society's work.

Turning for a moment to the report of the Council to its members, which had been circulated and was, doubtless, in the hands of those present, he would just like to mention that this year the Society had been able to secure a record number of members in the history of the Society. That in itself was very satisfactory, but it would not do for them to rest on their oars. It only proved that in past years there had been men and women willing to become members if they were only induced to do so, and it should be a stimulus to all of them to use their efforts in future, not only to keep up the existing membership, but still further to increase it. Just one word about the show at Chester. It would be seen from the accounts that a small profit had been made on this Show. It was an excellent one in every respect. The Local Committee and officials—indeed, everyone—rendered to him the greatest possible assistance, and did all they could for its success, and the welcome accorded to the Society was of the kindliest and warmest character. (Hear, hear.) The numbers attending the show were a little disappointing, and, as a consequence, the receipts were down. Trade depression in Lancashire, and particularly in the cities of Liverpool and Manchester, was no doubt the cause of this, but, at any rate, it was pleasing to be on the right side. As they knew, His Majesty the King visited the show on the second day, and, he thought, thoroughly enjoyed his visit. His Majesty was kind enough to write to Sir Gilbert after the Show graciously expressing his thanks for the arrangements made and the pleasure he derived from his visit.

Lord Desborough would succeed him in the Presidential Chair, and he knew he could bespeak for his Lordship the wholehearted support of the Council and members during his year of office, and trust that a year hence he would be able to say that the Show, which would be held at Reading next July, had been a most successful one. Reading had not received a visit from the Society since the year 1882. The present site was a good one, not too far away from the town. Reading was within easy reach of London, and, as Lord Desborough controlled the waters of the Thames, perhaps he would arrange to control the waters that help to fill that river from above, so that they were sure of a fine week for the show. (Laughter.)

At any rate, the Society would have carried out its duty in having the Show in the South of England, and he (Sir Gilbert) trusted the members in the Southern Counties would rally round the President and assist him in every possible way. The prize schedule would be a comprehensive one, and the Breed Societies were, as usual, augmenting the Prize Fund. To them the Society owed a debt of gratitude.

He need not detain the meeting longer with any *résumé* of the work of the Council, as it was set forth in the report, but he would proceed at once to the business of the meeting.

Accounts.

The PRESIDENT said the balance-sheet for 1924 was printed in the JOURNAL issued this year. The accounts for the Chester Show were in the hands of those present. He took it that Governors and members approved those accounts.

The report of the Council had been printed and circulated through the post to each member. The meeting would probably be willing that it should be taken as read.

Report of the Council.

Mr. G. P. HAWKINS (Cambridge) said that he felt it a great privilege to be allowed to move the adoption of the report. Before proceeding to do so, he would like to pay a tribute to the excellent and good work of the President of the Society. (Hear, hear.) Sir Gilbert Greenall had taken tremendous interest in agriculture, and especially in the breeding of cattle and horses. In addition, he had unselfishly given good work to the Society by acting as Honorary Director for many years.

It was his good fortune and privilege during a period of something like three years, on and off, to take some active part in the work of the Society, and also to meet Sir Gilbert from time to time. They in Cambridge conveyed to him their very sincere thanks for all that he did during the meeting in 1922. He brought to the President the greetings of the late Vice-Chancellor of the University, whom he had seen on the previous day. That might remind the President of the memorable occasion when he received a Degree, and when the University honoured itself by conferring that Degree.

Proceeding to the report, the outstanding feature, of course, was the Chester Show. The success of that Show everyone must agree was due to the unfailing efforts of Sir Gilbert Greenall. He not only acted as Honorary Director of the Show, but was Chairman of the Executive of the Local Committee, which raised something like £13,000. He (Mr. Hawkins) could speak with some knowledge of the work involved, because he had been Chairman of the Executive Committee at Cambridge, and he found it very difficult to raise even half that amount. He understood that Sir Gilbert's personality was so great that more than £10,000 was promised before the public appeal was made. He thought that that proved the great energy and the great popularity of their President in Lancashire and Cheshire.

After he had been for so many years Honorary Director of the Society, one might take it that Sir Gilbert would be pleased to retire from some of the strenuous work, and it had been said that he had some thought of doing so; but it had been whispered to him that Sir Gilbert intended to continue in the office of Honorary Director of the Society until after the Manchester Show in 1930. (Applause.) He was sure that all the members would be glad to know that. It was to be hoped that history might repeat itself, because the Royal Show in Manchester, at Trafford Park, in 1897 he thought it was, must have been a great success.

The annual show did not cover the whole of the work of that great Society. The Society gave practical help in connection with scientific knowledge to all those who cared to accept it. He would like to say at once that the work that was done in connection with the University of Cambridge, the School of Agriculture and the School of Forestry, was a very great help to agriculturists. There was also the research work that was being carried on in different parts of the country. If members would only take advantage of the work that was done both on the chemical side and on the veterinary side they would receive far more help than they realised. He spoke feelingly, because he knew something about contagious abortion. That, of course, was one of the great perils and evils to people in a small way who were trying to raise a good herd of cows for milk-producing purposes.

There was one matter in the Report which had given great pleasure in Cambridge. The Report called attention to the honour that His Majesty the King had conferred upon one of the consulting officers of the Society, Sir Rowland Biffen. Sir Rowland took a very active part in wheat cultivation. All those who knew anything about Sir Rowland would know what a splendid man he was, and they were delighted to know that the King had honoured him.

The President had referred to the question of membership. It would gladden the heart of the Lord Lieutenant of Cambridgeshire (Mr. Adeane) if the Society could manage to double its membership. It was well known in business circles that nothing but membership and nothing but combination would bring about any good results. It was to the membership of the Society that one looked to carry on and further its objects. He hoped that each member of the Society would do his best to introduce at least one other member.

He had very pleasant memories of the good work which the officials did at Cambridge and at the various shows at which he had met them. He would like to bear his testimony to their work, and he was sure that all those present would agree with him.

Mr. WILLIAM GRAHAM (Penrith) said that he had very great pleasure in seconding the resolution which had been so pleasantly and ably put before the meeting. They all recognised their great friend Sir Gilbert Greenall's energy and good work in agriculture. He was very pleased to hear him make a reference to the welcome he received in the County of Cheshire. That was not surprising. He remembered that a few years ago, when he had the honour of staying with Sir Gilbert, Lady Greenall said that she came from Chester. He had no doubt that the energies and the activities of Sir Gilbert in the early days attracted the attention and the admiration of the inhabitants of Cheshire. His activities and his energies and the great work he had done for British agriculture while he had so ably presided over and regulated the organisation to which they were all so proud to belong had been most beneficent.

The President had mentioned that there had been a great increase in the membership of the Society. It was very important that the Society should be as strong and powerful as it possibly could be. He saw in front of him gentlemen whom he had known individually for many years, and some very influential gentlemen too. They had sitting amongst them in his usual modest way a gentleman who could do a very great deal for agriculture, namely, Lord Bledisloe, if he would only take his cue from the suggestions made at the Council meetings of the Royal Agricultural Society. He (Mr. Graham) had been present at some of those Council meetings, and he knew the persuasive way in which Lord Bledisloe put his arguments. He had always thought that he was a little too bashful, and that he had not absolutely pushed home the views which he represented and expressed. As the Royal Agricultural Society had such an influential member he thought that the members were absolutely entitled to say a few words on various matters which they wished to have most thoroughly searched into and have present in the minds of the Ministry of Agriculture. He personally knew, unfortunately, and no doubt a great many people in that room knew, that agriculture was not at the present time in a very satisfactory position. In fact, the position of agriculture generally was far from satisfactory. He sometimes regretted that their great organisation had not a little more political power at its elbow than it had. He believed that the Charter precluded it from using its influence except in a *sub rosa* manner. He was quite certain that their future President would do all that he could in the House of Lords to assist their great industry.

Foot-and-mouth disease was rampant in this country. He had the honour of serving on the Departmental Committee in 1922, and he had not the very slightest doubt in saying that in the opinion of most of those who sat on that Committee the disease was imported from the Continent.

It was imported in various ways. He did not pay much attention to the birds and the wind; birds flew hither and thither, and the wind blew where it listed; but he thought that the Society should enforce upon the Government the view of agriculture in general that the disease was imported from the Continent through vegetable matter. It was not only through packing hay and straw. If one went to Covent Garden he would see great bales of cabbages and Brussels sprouts, and all sorts of things that came into this country, which were grown in countries where the disease was rampant. There were seven thousand centres in Holland alone. Those things no doubt brought into this country the germs of the disease, which spread very freely.

There was another point which needed emphasising. He believed that the outbreaks of the disease originated, generally speaking, from pigs. Pigs were fed on the offal of vegetable matter. No doubt the disease originated in the large pig-breeding establishments. Those establishments were in contact with infirmaries and large Government and municipal bodies, which no doubt used foreign-grown produce instead of British-grown produce. Agriculturists paid their rates and their taxes. Nobody felt them more severely than they did, and yet they were mulcted in all sorts of expenditure, and had their herds and flocks exposed to virulent infection, simply because the Government had not the pluck and the courage to regulate in some way the importation of foreign vegetable matter. He hoped that the agricultural members in the House of Lords and in the House of Commons would give their attention to the question, and encourage the Government to take a much more serious view of the question. One could always encourage a person with a little coercion.

There was another question, that of sheep scab. Certain areas in England were perfectly free from that disease and certain areas had it brought into them from other areas. It was perfectly well known where it existed. He thought that there was a gentleman from Wales present. He had seen him entering the meeting. There were certain areas in Wales which were no doubt great centres of sheep scab. He was sitting next to a Scotsman, and he scarcely dared to say it; but there were some areas in Scotland also where the disease was rampant. Sheep wandered on the fells and amongst the rocks, and they rubbed themselves and scratched themselves, and did all sorts of things, and the shepherds would not collect them sufficiently often for the purpose of dipping them. If dipping took place at the centres where the disease existed, the disease would not spread throughout the country. It was very well known that every cattle truck that a scab-infected sheep travelled in from the market where it had been exposed was liable to spread infection. The points which he had mentioned were points which ought to be taken to heart very seriously. Some good might be done to the country generally if the centres where sheep scab was really rampant were scheduled. If they were scheduled the whole of the rest of England would very soon be free from that pestilent disease.

He must congratulate the President and the Council and the Committees on the excellent work which they had done.

His only excuse for accepting the opportunity of seconding the resolution was that he was just about to enter upon his fiftieth year as a member of the Royal Agricultural Society. He could assure them that the fifty years that he had been a member of the Society had made him feel that he was in the aristocracy of the agricultural community of Great Britain. He thought that the Society was one which everybody should join. The members felt themselves to be in safe hands. He would like to see the Society placed in such a position that it would be able to back up British farmers rather more thoroughly than it was able to do at present. If the charter could be amended in such a way as to give the Society more power in influencing the Government it would be a very good thing, although they did not want to find fault unduly with the present excellent Government. Anyhow, a little gingering from the Royal Agricultural Society would have an effect even on the present extraordinary Government, which was going to last for the next five years.

The report and accounts were received and adopted.

Election of President.

Sir WILLIAM MOUNT said that he had the great privilege of proposing :—

> "That Lord Desborough, G.C.V.O., be elected President of the Society, to hold office until the next ensuing annual general meeting."

(Loud applause.)

His only excuse for having the privilege of moving the resolution was that he had the honour of being one of the representatives of Berkshire. It was a very great compliment that one of the most distinguished residents in the district should have been chosen as President of the Society for the year when the show was to be held at Reading. But it was not only because of the local associations of Lord Desborough that he was pleased to move the resolution. It was because he believed him to be eminently fitted for the high office which he had to hold. He had served his apprenticeship, if he might say so in the presence of some of the members of the Royal Counties Agricultural Society, as President of that Society. He had been a supporter of the Royal Show, and he had been distinguished in many aspects of sport, and he (the speaker) hoped that the day might be far distant when the fact that a man was a sportsman would not endear him to Englishmen. He thought that he could assure Lord Desborough that the trouble of ruling over the affairs of the Council of the Royal Agricultural Society of England would be nothing compared with what he had experienced in some of his undertakings hitherto.

Lord Desborough was following in the steps of perhaps the best and one of the most popular Presidents that the Society had ever had. Sir Gilbert Greenall would leave behind him very high traditions and a very great example, but he (Sir William) was certain that in Lord Desborough the Society would have a President who would uphold those traditions and support that example.

Mr. PERCY CRUTCHLEY regarded it as a great privilege to be allowed to second the resolution. He felt justified in doing so, as he had known Lord Desborough longer than he had known any man in that room. Sir William Mount had touched upon several of the qualifications of Lord Desborough for high office, but he had not touched upon all of them. Indeed, it was not possible to touch upon all of them, because the number of his lordship's claims to distinction was quite overwhelming. He thought that they would all agree that it was most appropriate that the show next year, by the banks of the Thames, should be presided over by the ruler of the Thames. The Society had had many distinguished presidents in the past, presidents distinguished for various things, but he was confident that it would never be presided over by so amphibious a president.

The motion was carried by acclamation.

Lord DESBOROUGH said that he rose with a great deal of diffidence and with the full consciousness that he could not claim any of those high merits of which the proposer and seconder had spoken. He, at all events, agreed that he had served a certain amount of agricultural apprenticeship before he was elected as President of the Royal Agricultural Society. He began with numerous and not wholly inexpensive local societies—(laughter)—which he might say continued. (Laughter.) He had also had the honour of serving an apprenticeship in the Central and Associated Chambers of Agriculture for two years and as President also of the British Dairy Farmers' Association and of the Shorthorn Society, so he did not come wholly unacquainted with the agricultural position. All those societies that he had mentioned had done their best to improve the position of the farmer. They had at all events prevented it from being a very great deal worse than it might have been. It was a culmination of those various offices that he should have been elected by the kindness of the members to the chair of the Royal Agricultural Society of England. England was a small country, but it had set an example throughout the whole world of what agricultural societies should be, and of what the breeders of stock of every sort and kind should aim at. Although it could not be claimed at the present time that agriculture was a very paying industry, yet agriculturists in England could point to what this country had been able to do in the past in building up the very best breeds all over the world. It had been said that agriculture was the most distributed industry in this country. He attended a debate in the House of Lords two or three days previously, and he began rather to doubt that, and he came to the conclusion that agriculture came a very bad second to betting. (Laughter.) Which was the more profitable of the two industries he was not quite sure, but as he had the fathering of the Moneylending Bill in the House of Lords he was informed, and he supposed on the best available authority, that a good deal of the moneylending was due to betting; and he came to the conclusion, owing to the extraordinary prosperity of both bookmakers and moneylenders, that the betting industry was not, on the whole, such a very satisfactory one. (Laughter.)

The Society was going to meet next year at Reading, and it was going to meet under the menace, which had been too long hanging over this country, of the terrible scourge of foot-and-mouth disease. He certainly hoped that the Orders would have been taken off long before the date of the Reading Show. He would like to suggest that, so great was the difference of opinion with regard to what should be done to combat that fell disease, the extremely able experts who were connected with the Royal Agricultural Society should make a very plain statement setting forth the advantages and the disadvantages of slaughter, and the advantages and the disadvantages of always having foot-and-mouth disease in the country, and also a very plain financial statement as to what over a series of years had been the results of the two methods. He thought that if that were done the agricultural community would receive a great deal of enlightenment.

He thoroughly hoped, with both the proposer and the seconder of the resolution, that the Reading Show would be a very great success. He thought that it promised to be so. Reading was on two very good lines of railway, and the showground was a very good one, and it was far enough removed from the river. He would bear in mind the instructions which he had that day received that he had to control not only the river but also the weather. He had had some experience of both. When the river rose people wrote an enormous quantity of letters to him, and said: "You are an awful fool. Why don't you stop the floods?" He wrote back and said: "You stop the rain, and I will stop the floods." He rather understood from the chairman that on the occasion of the Reading Show he would have to do both. Well, of course, it would be done, and the members need not bother any more about that. (Laughter.) There was another reason why he thought that members could look forward to the Reading Show with confidence. He did not know until quite lately that Sir Gilbert Greenall was a doctor. They all knew that he was a very great agriculturist. It was because of that that he had been made a Doctor of Common Law. (Laughter.) With the assistance of Dr. Greenall, who had, he believed, already taken a house on the spot, and who was the Honorary Director, he felt perfectly sure that the show at Reading might almost emulate Sir Gilbert's own show last year at Chester. He knew that his patriotic and local feelings would not prevent him doing his very best to make it so.

Election of Trustees.

The President announced that the following twelve Trustees had been nominated by the Council in accordance with the bye-laws :—

H.R.H. the Prince of Wales, K.G., York House, S.W.1.
H.R.H. the Duke of York, K.G., White Lodge, Richmond.
C. Adeane, C.B., Babraham Hall, Cambridge.
The Duke of Bedford, K.G., Woburn Abbey, Bedfordshire.
Col. F. S. W. Cornwallis, Linton Park, Maidstone, Kent.
The Earl of Coventry, Croome Court, Severn Stoke, Worcestershire.
Percy Crutchley, Sunninghill Lodge, Ascot, Berkshire.
The Duke of Devonshire, K.G., Chatsworth, Bakewell.
Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington.
The Earl of Northbrook, Stratton, Micheldever, Hampshire.
The Hon. Cecil T. Parker, The Grove, Corsham, Wiltshire.
Lieut.-Col. E. W. Stanyforth, C.B., Kirk Hammerton Hall, York.

On a show of hands they were declared re-elected as Trustees, to hold office until the next ensuing annual general meeting.

Election of Vice-Presidents.

The Vice-Presidents were elected in a similar manner, their names being :—

C. Coltman-Rogers, Stanage Park, Bucknell, Salop.
The Earl of Derby, K.G., Knowsley, Prescot, Lancashire.
Lord Desborough, G.C.V.O., Taplow Court, Taplow, Bucks.
R. M. Greaves, Wern, Portmadoc, North Wales.
Lord Harlech, Brogyntyn, Oswestry.
William Harrison, Albion Ironworks, Leigh, Lancs.
Ernest Mathews, C.V.O., LL.D., Elmodesham, Amersham.
The Duke of Portland, K.G., Welbeck Abbey, Worksop.
The Earl of Powis, Powis Castle, Welshpool, Mont.
Frederick Reynard, Sunderlandwick, Driffield, Yorkshire.
The Duke of Richmond and Gordon, K.G., Goodwood, Chichester.
The Earl of Yarborough, Brocklesby Park, Habrough, Lincolnshire.

Election of Auditors.

Captain C. Bertram Rolfe then moved :—

> "That the best thanks of the Society be tendered to Messrs. Jonas M. Webb, Hubert J. Greenwood and Newell P. Squarey for their services as Auditors, and that they be re-elected for the ensuing year."

He was sure they all hoped that the Auditors might be able to report a large credit balance after the Reading Show next year.

This resolution was seconded by Mr. F. L. Gooch, and adopted unanimously.

Elections to the Council.

The President, in accordance with Bye-law 153, reported the names of the following ordinary members of Council who had been elected to represent the several Divisions of the Society included in Group B, so that the meeting might "take cognizance" of their election :—

Durham : William Burkitt, Grange Hill, Bishop Auckland ; Christopher Middleton, Vane Terrace, Darlington.
Yorks (West Riding) : Lieut.-Col. George R. Lane-Fox, M.P., Bramham Park, Boston Spa ; Leopold C. Paget, Middlethorpe Hall, York.
Nottingham : John Bell, The Hall, Thirsk.
Leicester : Sir Arthur Grey Hazlerigg, Bart., Noseley Hall, Leicester.
Rutland : E. Guy Fenwick, North Luffenham Hall, Stamford.
Suffolk : S. R. Sherwood, Playford, Ipswich ; Fred Smith, Deben Haugh, Woodbridge.
Buckingham : B. J. Gates, Wing Park, Leighton Buzzard.
Essex : Sir Walter Gilbey, Bart., Elsenham Hall, Elsenham ; Hon. E. G. Strutt, C.H., Whitelands, Hatfield Peverel.
London : Frank P. Matthews, 27, Cavendish Square, W.1 ; F. Hamlyn Price, 7, Harley Gardens, The Boltons, S.W.10 ; Lieut.-Col. Sir Archibald Weigall, K.C.M.G., Petwood, Woodhall Spa.
Shropshire : Alfred Mansell, College Hill, Shrewsbury ; E. Craig Tanner, Eyton-on-Severn, Cross Houses.
Hereford : Sir John R. G. Cotterell, Bart., Garnons, Hereford.
South Wales : Col. C. Venables Llewelyn, Llysdinam, Newbridge-on-Wye.

Devon: Lord Mildmay of Flete, Flete, Ermington, S.O.
Wiltshire: Daniel Combes, Dinton Manor, Salisbury.
Surrey: Sir Bernard E. Greenwell, Bart., Marden Park, Woldingham.

Under Bye-law 149, Major Robert Barbour, of Bolesworth, Tattenhall, and Mr. J. Herbert Hall, of Hill House, Mobberley, Knutsford, have been elected as additional representatives on the Council for the Division of Cheshire.

To fill vacancies, Mr. Wyndham E. Hale, of Mowbreck Hall, Kirkham, and Mr. James Piper, of The Grange, Burntisland, Fife, have been elected as representatives of the Divisions of Lancashire and Scotland respectively.

Suggestions of Governors and Members.

The PRESIDENT, having inquired if any Governor or Member had any remark to make or suggestion to offer for the consideration of the Council,

A MEMBER said that there was one simple little suggestion that he would like to put before the meeting. At the Show last year at Chester he wished to introduce two new members, and he had difficulty in finding proposal forms on the table in the Members' Pavilion for them to fill in. He thought that that was one of the little things that might easily be remedied by the responsible authorities.

The PRESIDENT thanked the member very much. He said that as a rule people became new members at the gate, because Mr. Aveling had the forms, and when anybody who wanted to be a new member came he made him a member at once, instead of making him pay at the turnstile. It was found that most people preferred that to being elected afterwards. He would make a note of the point, and he would see that next year there were some forms put upon the table.

Thanks to retiring President.

Colonel F. S. W. CORNWALLIS said that he had had a very pleasant duty entrusted to him. He was a little handicapped by the fact that every preceding speaker had taken the same subject. Nevertheless, he had the high honour now of moving that the best thanks of the members be given to their retiring President, Sir Gilbert Greenall. (Applause.) He had the honour of proposing his election in that room twelve months ago, and asking him then to fill for the second time the posts of President and Honorary Director. Most of the members had testified already that afternoon to the splendid manner in which Sir Gilbert had carried out his duties in that dual capacity.

He did not think that the success of a President's year of office was measured by the profit on the Show. It was measured very largely, in his judgment, by the way in which, in his own locality, the President rallied everybody round him and secured a great welcome for the Society. They all knew that at Chester not only the amount contributed but the warmth of the welcome were such as members had rarely experienced in their history, and that, too, at a time when the County of Cheshire was going through a very severe commercial crisis, and had suffered perhaps more than any other County of England from the ravages of foot-and-mouth disease.

One never asked a lady's age, but he happened to be President this year of the Bath and West Show, which he thought was an elder sister of the famous Royal Agricultural Society. Perhaps it was not inappropriate, therefore, that he should be present to propose a vote of thanks by the members of the Society to the retiring President.

Sir Gilbert Greenall took over his duties as Honorary Director, as nobody knew better than he (the speaker) did, in the year when the Society went to Derby after quitting Park Royal, and from that day to the present he had done more than anyone to bring the Society to a position of considerable wealth and considerable activity. The members of the Council had some very striking figures given to them that morning by Mr. Adeane, the Chairman of their Finance Committee, who showed them that, whereas the receipts were about £20,000 at Derby, they came to-day to about £58,000, showing that the work of running the Show to-day was about two and a half times as much as it was when Sir Gilbert took the work over.

When people tried to express their very particular admiration of a man they always said that he was a "white man." He believed that Sir Gilbert Greenall claimed to be a "Large White" man. (Laughter.) At any rate, that was the way in which the members of the Council and every member of the Society regarded him. They hoped that they would have the benefit of his great weight and influence to carry the Society along for many years to come. They were all very glad to hear that, at any rate, they were secure of that until 1930.

He was quite sure that no member either of the Council or of the Society would like him to conclude his few remarks, which were quite unworthy of the subject, without saying how much they felt they owed to Lady Greenall—(cheers)—and to other members of Sir Gilbert Greenall's family and to members of his staff, who had always assisted him most loyally in the great work to which he had put his hand. They all hoped that Sir Gilbert might live long to continue that work, and they were all more grateful than any words could express for all that he had done in the past.

Mr. ERNEST MATHEWS seconded the motion. He said that he felt that it was a great honour and a great privilege to be allowed to do so. It was a privilege, and he used the word advisedly, for the reason that he had served as Steward under Sir Gilbert since the day when he took over the Directorship of the Show. As steward he had seen all the trials and the difficult work and the difficult questions which had come before Sir Gilbert, and he had admired the wonderful way in which he had got out of every difficulty. He would give just two illustrations. The first day at the Doncaster Show foot-and-mouth disease was about. There were a great many telegrams from the Board of Agriculture, as it was in those days, and he remembered distinctly being called to a Council meeting at twelve o'clock on the Sunday night before the Show opened to settle what was to be done if orders came from the Board that cattle were not to be admitted. There were very few members present at the Council meeting, because there were not very many in the Yard. At five o'clock next morning—he believed that was the time—orders came down from the Board. Everything was already planned by Sir Gilbert, and the cattle were sent back with the minimum amount of delay. The maximum amount of work was done by Sir Gilbert and his staff.

The other illustration was in connection with another show later on. The workman, if he did not get his way, was very apt to strike. Some carpenters wanted to go on strike the last week before the Show. If they had gone on strike it would have been very bad for the Show. When the matter came before a small Committee, the Committee asked Sir Gilbert to settle the strike. He went down to the Showyard and settled the strike directly. He (the speaker) thought that it was simply Sir Gilbert's charming manner and the way in which he got over all difficulties with the minimum of talk.

The motion was carried by acclamation.

Sir GILBERT GREENALL thanked the members most sincerely for once again passing a vote of thanks to him for the very little which he had done and for the not absolutely perfect way in which he had done it. He had had a great many difficult questions come before him. Really, one could only do one's best. Sometimes it did not come off; but he was rather lucky and it generally did. He thoroughly appreciated the honour which the Society did him a year ago in making him its President. He thought that although the Society did not make a great deal of money at Chester, it had a most excellent Show. It was one of the easiest-going Shows that he remembered. There was not the least bit of trouble in the Yard from beginning to end, and he thought that everybody who went enjoyed himself. If they had given satisfaction and pleasure to everybody they had done a very great deal.

As members knew, he never could make a speech. If he was a speaker he would say a great deal more. He thanked one and all and everybody connected with the Society, especially Mr. Turner and the officials, for the very excellent way in which they had supported him. The very great success of the Show at Chester was due to them.

Royal Agricultural Society of England.

AWARDS OF PRIZES AT CHESTER, 1925.

ABBREVIATIONS.

I., First Prize. II., Second Prize. III., Third Prize. IV., Fourth Prize. V., Fifth Prize. R. N., Reserve Number. H. C., Highly Commended. C., Commended.

The responsibility for the accuracy of the description or pedigree, and for the eligibility to compete of the animals entered in the following classes, rests solely with the Exhibitors.

Unless otherwise stated, each Prize Animal in the Classes for Horses, Cattle, Goats, Sheep, and Pigs, was "bred by Exhibitor."

HORSES.

Shires.

No. in Catalogue.

Class 1.—*Shire Stallions, born in* 1922.

4 **I. (£20, & R. N. for Champion.[1])**—HORNCASTLE SHIRE HORSE SOCIETY, Horncastle, for **Carlton Wyresdale** 39120, bay, bred by E. Skevington, Park Farm, Bromham, Bedford; *s.* Wyresdale Draughtsman 34481, *d.* 85814 Moors Sea Breeze *by* Moors Kitchener 25443.

5 **II. (£10.)**—W. H. NEALE, Shustoke, Coleshill, Birmingham, for **Coleshill Dagger** 39450, bay, bred by F. O. Bomford, Leigh Sinton, Malvern; *s.* Marden Dagnam 34137, *d.* 97454 Chirkenhill Writtle Princess *by* Babingley Nulli Secundus 26993.

1 **III. (£5.)**—WILLIAM J. CUMBER, Theale, Berks, for **Frodingham Clansman** 39196, brown, bred by W. and J. Broster, Dove Farm, Caverswall, Stoke-on-Trent; *s.* Leek Clansman 35792, *d.* 97898 Dove Prudence *by* Sussex Statesman 29924.

3 **R. N.**—R. E. EVANS, The Acres, Pulford, Wrexham, for **Fosseway Friar.**

H. C.—7. **C.**—8.

Class 2.—*Shire Stallions, born in* 1923.

9 **I. (£20, & Champion.[1])**—J. MORRIS BELCHER, Tibberton Manor, Newport, Salop, for **Eaton Premier King** 39486, brown, bred by T. E. Pleavin, Gwastad Farm, Cefn-y-Bedd; *s.* Eaton Peace King 36515, *d.* 98408 Gwastad Blossom *by* Robin Hood 10th 30838.

10 **II. (£10.)**—JAMES FORSHAW & SONS, Carlton-on-Trent, Newark, for **Coleshill Inventor** 39452, brown, bred by F. D. Bowyer, Maxstoke, Coleshill; *s.* Primley Inventor 35096, *d.* Draughtsman's Queen *by* Warton Draughtsman 27895.

11 **III. (£5.)**—SIR ARTHUR NICHOLSON, Highfield Hall, Leek, for **Leek Victor** 39523, bay, bred by A. Colclough, Hassall Hall Farm, Sandbach; *s.* Pendley Footprint 37728, *d.* 96624 Alsager Princess Royal *by* Champion's Goalkeeper 30296.

Class 3.—*Shire Stallions, born in* 1924.

13 **I. (20.)**—HIS MAJESTY THE KING, Sandringham, for **Jovial Monk**, bay; *s.* Monks Green Friar 35891, *d.* 104348 Marden Fuchsia *by* Champion's Goalkeeper 30296.

16 **II. (£10.)**—JAMES FORSHAW & SONS, Carlton-on-Trent, Newark, for **Broadcaster**, bay brown, bred by Rex Howkins, Clifton Reynes, Olney, Beds; *s.* Monks Green Friar 35891, *d.* 112542 Pendley Discord *by* Champion's Goalkeeper 30296.

14 **III. (£5.)**—J. MORRIS BELCHER, Tibberton Manor, Newport, Salop, for **Tibberton Ringleader**, bay, bred by George Lockley, Summerhill Farm, Whitgreave, Stafford; *s.* Pendley Leader 35071, *d.* 95113 Ranton Heiress *by* Ranton Forest King 32749.

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[1] Champion Gold Medal, and £5 to the Reserve, given by the Shire Horse Society for the best Stallion in Classes 1 to 3. A Prize of £5 is also given by the Shire Horse Society to the Breeder of the Champion Stallion, provided the Breeder is a Member of the Shire Horse Society, and the Dam of the animal is registered in the Shire Horse Stud Book.

Class 4.—*Shire Mares, born in or before* 1920, *with foals at foot.*

22 **I. (£20, & Champion.[1])**—G. R. C. FOSTER, Anstey Hall, Trumpington, Cambridge, for 88450 **Erfyl Lady Grey**, grey, born in 1915 [foal *by* Darley Wild Wave 38149], bred by William Vaughan, Hafod, Llanerfyl, Welshpool; *s.* Moors Kitchener 25443, *d.* 88451 Erfyl Lady White *by* Moors Chief 22594.

25 **II. (£10.)**—SIR BERNARD GREENWELL, BART., Marden Park, Woldingham, Surrey, for 102248 **Cippenham Muriel**, brown, born in 1919 [foal *by* Champion's Goalkeeper 30296], bred by E. W. Headington, Cippenham Court, Slough; *s.* Monks Green Friar 35891, *d.* 92233 Cippenham Ethel *by* Babingley Nulli Secundus 26993.

26 **III. (£5.)**—N. HOCKEN, Kilkenny, Bibury, Fairford, Glos., for 111022 **Bonnie Lizzie**, bay, born in 1920 [foal *by* Maryshall Majestic 36747], bred by J. Gould, Jack Heygate Farm, Warburton; *s.* Warburton Forester 2nd 36194, *d. by* Danesfield Stonewall 22314.

24 **R. N.**—THOMAS GREEN, The Bank, Pool Quay, Welshpool, for **Molly.**

Class 5.—*Shire Mares, born in or after* 1921, *with foals at foot.*

29 **I. (£20.)**—G. R. C. FOSTER, Anstey Hall, Trumpington, Cambridge, for 112309 **Medmenham Princess**, bay, born in 1921 [foal *by* Withy Pitts Gay Prince 39072], bred by R. H. Keene, Westfield, Medmenham, Marlow; *s.* Welbeck Redlynch 36204, *d.* 85809 Montem Princess *by* Longforth King Cole 30643.

30 **II. (£10.)**—JAMES GOULD, Crouchley Hall, Lymm, Cheshire, for 112191 **Lymm Graceful**, bay, born in 1921 [foal *by* Herontye Buscot 37494]; *s.* Horning Clansman 35727, *d.* 95151 Reddish Duchess *by* Duke's Double 30385.

Class 6.—*Shire Colt Foals, the produce of Mares entered in Class* 4 *or* 5.[2]

33 **I. (£10.)**—JAMES GOULD, Crouchley Hall, Lymm, Cheshire, for **Lymm Blend**, bay, born March 15; *s.* Herontye Buscot 37494, *d.* 112191 Lymm Graceful *by* Horning Clansman 35727.

Class 7.—*Shire Filly Foals, the produce of Mares entered in Class* 4 *or* 5.[2]

37 **I. (£10.)**—G. R. C. FOSTER, Anstey Hall, Trumpington, Cambridge, for bay, born April 10; *s.* Withy Pitts Gay Prince 39072, *d.* 112309 Medmenham Princess *by* Welbeck Redlynch 36204.

38 **II. (£5.)**—JAMES GOULD, Crouchley Hall, Lymm, Cheshire, for **Lymm Sunbeam**, bay, born April 25; *s.* Mosscar Forest Champion 38929, *d.* 108889 Lymm Charm *by* Snowdon Menestrel 30924.

40 **III. (£3.)**—N. HOCKEN, Kilkenny, Bibury, Fairford, Glos., for **Kilkenny Actress**, bay, born April 24; *s.* Maryshall Majestic 36747, *d.* 111022 Bonnie Lizzie *by* Warburton Forester 2nd 36194.

39 **R. N.**—SIR BERNARD GREENWELL, BART., Marden Park, Woldingham, Surrey.

Class 8.—*Shire Fillies, born in* 1922.

45 **I. (£20, & R. N. for Champion.[1])**—SIR ARTHUR NICHOLSON, Highfield Hall, Leek, for 115061 **Pendley Selina**, bay, bred by W. E. Evans, Llandilovrunys, Nantgaredig; *s.* Moulton Nonsuch 31680, *d.* 116263 Cothi Blossom *by* Amport Spark 26975.

44 **II. (£10.)**—THE DUKE OF DEVONSHIRE, K.G., Chatsworth, Bakewell, 113887, for **Chatsworth May Queen**, bay; *s.* Field-Marshal 5th 35627, *d.* 84311 Chatsworth Marion *by* Friar Tuck 4th 31447.

48 **III. (£5.)**—JOHN VAUGHAN, The Moors, Welshpool, for 113891 **Chearsley Laurel**, bay, bred by the Exors. of R. Roadnight, Chearsley, Aylesbury; *s.* Field-Marshal 5th 35627, *d.* 87889 Chearsley Bonny Lass 2nd *by* Friar Tuck 4th 31447.

42 **R. N.**—HIS MAJESTY THE KING, Sandringham, for **Joan of Arc.**

H. C.—43, 46, 47.

Class 9.—*Shire Fillies, born in* 1923.

54 **I. (£20.)**—A. THOMAS LOYD, Lockinge, Ardington, Wantage, for 116992 **Monks Green Remembrance**, bay, bred by Arthur Smiles, Monks Green Stud Farm, Fetcham; *s.* Champion's Goalkeeper 30296, *d.* 99320 Monks Green Princess *by* Sundridge Coming King 33568.

59 **II. (£10.)**—JOHN VAUGHAN, The Moors, Welshpool, for 116996 **Moors Laura**, black; *s.* Basildon Clansman 36277, *d.* 103318 Gleadless Forest Queen *by* Friar Tuck 4th 31447.

55 **III. (£5.)**—S. A. MADELEY, Rodway Manor, Waters Upton, Wellington, Salop, for 117258 **Rodway Countess**, brown, bred by E. Clothier, Batch Farm, Sutton Ditcheat, Evercreech, Som.; *s.* Markeaton Reigning King 36744, *d.* 104368 Mark Queen *by* Harboro' Charming King 28356.

56 **IV. (£4.)**—JAMES MERRITT, Old Hall Stud Farm, Willaston, Birkenhead, for 116595 **Hadlow Duchess**, dark bay; *s.* Rokeby Clansman 36023, *d.* 71287 Kerridge Queen *by* Redlynch Forest King 23626.

53 **R. N.**—JOHN C. JACKSON, The Grange, Askern, Doncaster, for **Knottingley Tranquil.**

H. C.—52, 58.

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[1] Champion Gold Medal, and £5 to the Reserve, given by the Shire Horse Society for the best Mare or Filly in Classes 4, 5, 8, 9 and 10. A Prize of £5 is also given by the Shire Horse Society to the Breeder of the Champion Mare or Filly, provided the Breeder is a Member of the Shire Horse Society, and the Dam of the animal is registered in the Shire Horse Stud Book.

[2] Prizes given by the Shire Horse Society.

Class 10.—*Shire Fillies, born in* 1924.

70 **I. (£20.)**—Sir Arthur Nicholson, Highfield Hall, Leek, for **Leek Diana**, brown ; *s.* Pendley Footprint 37728, *d.* 104096 Leek Vanity *by* Champion's Clansman 29221.

68 **II. (£10.)**—A. Thomas Loyd, Lockinge, Ardington, Wantage, for **Lockinge Seabreeze**, bay, bred by F. W. Sharman, Grass Farm, Spalding ; *s.* Tregondale King Cole 33603, *d.* 75877 Seabreeze *by* Lockinge Black Thorn 24385.

63 **III. (£5.)**—G. R. C. Foster, Anstey Hall, Trumpington, Cambridge, for **Bower Ladyship 2nd**, bay ; *s.* Colney Fair 37253, *d.* 80920 Claypole Dray Queen *by* Goadby Drayman 27367.

66 **IV. (£4.)**—John C. Jackson, The Grange, Askern, Doncaster, for **White Meadow Mavourneen**, bay, bred by H S. Tanburn, White Meadow, Ashbourne ; *s.* Champion's Goalkeeper 30296, *d.* 110249 Theale Iris *by* Theale Lockinge 35246.

65 **R. N.**—Sir Bernard Greenwell, Bart., Marden Park, Woldingham, for **Marden Rhoda.**
H. C.—64. **C.**—67.

Class 11.—*Shire Geldings, by registered sires, born in or before* 1921.

74 **I. (£20[1].)**—Mann, Crossman & Paulin, Ltd., Albion Brewery, Whitechapel Road, London, E.1, for **Champion**, bay, born in 1919, bred by N. Hocken, Kilkenny, Bibury, Fairford ; *s.* Ansty Forest King 28035.

77 **II. (£10.[1])**—Edward Parry, Tyddyn y fron, Bettws, Abergele, for **Welsh Boy**, brown, born in 1921, bred by G. Griffiths, Bryn Farm, Carnarvon ; *s.* Golden King 2nd 33985.

76 **III. (£5.[1])**—Geo. G. Marsh & Son, Mount Pleasant, Speke, Liverpool, for **Speke Darkie**, black, born in 1920, bred by J. and T. Halhead, Hornby, Lancaster ; *s.* Pilling Premier 33455.

80 **IV. (£4.)**—Victoria Coal Co. (Cardiff), Ltd., 82, Crwys Road, Cardiff, for **Cymro Glan**, bay, born in 1921, bred by J. Lewis, Anglesey ; *s.* Throstle Royal Duke 35252, *d.* Star *by* Yew Tree Zealot 26857.

75 **R. N.**—Mann, Crossman & Paulin, Ltd., for **Commodore.**
H. C.—71, 72, 78. **C.**—73.

Class 12.—*Shire Geldings, by registered sires, born in* 1922.[1]

85 **I. (£20.)**—Geo. G. Marsh & Son, Mount Pleasant, Speke, Liverpool, for **Uncle Ben**, grey, bred by B. Farrow, Hawton Grange, Newark ; *s.* March King 34955.

83 **II. (£10.)**—Mann, Crossman & Paulin, Ltd., Albion Brewery, Whitechapel Road, London, E.1, for **Albion Majestic**, bay, bred by D. W. Lewis, Godstone, Surrey ; *s.* Maryshall Majestic 36747.

81 **III. (£5.)**—H. E. Farnsworth, Rendcomb Buildings, Cirencester, for **Rendcomb Ragman**, bay ; *s.* Ratcliffe King Cole 36846, *d. by* Ratcliffe Forest King 23622.

86 **R. N.**—William T. Roberts, Haywood, 83, Bedford Street South, Liverpool, for **Haywood Pride.**
H. C.—84.

Clydesdales.

Class 13.—*Clydesdale Stallions, born in* 1922.

89 **I. (£20.)**—Albert James Marshall, Bridgebank, Stranraer, for **Bridgebank Footman** 20877, dark brown, bred by James Dickie, Kelton House, Dumfries ; *s.* Dunure Footprint 15203, *d.* Meadow Sweet 53497 *by* Royal Favourite 10630.

90 **II. (£10.)**—A. Montgomery & Co., Jordieland, Kirkcudbright, for **Precedence** 21116, bay, bred by Smith and Alston, Ellingham Home Farm, Chathill, Northumberland ; *s.* Happy Choice 19741, *d.* Gala Jean 51360 *by* Baron Ideal 14585.

88 **III. (£5.)**—Albert James Marshall, for **Bridgebank Footguard** 20875, brown, bred by J. E. Kerr, Harviestoun, Dollar ; *s.* Dunure Footprint 15203, *d.* Harviestoun Aida 50574 *by* Apukwa 14567.

Class 14.—*Clydesdale Stallions, born in* 1923.

92 **I. (£20, & R. N. for Champion.[2])**—R. and J. Chapman, Johnston, Gartcosh, for **Baron's Eclipse** 21032, brown, bred by J. P. Sleigh, St. John's Wells, Fyvie ; *s.* Dunure Footprint 15203, *d.* Wells Nona 54072 *by* Hiawatha Again 18765.

93 **II. (£10.)**—James Kilpatrick, Craigie Mains, Kilmarnock, for **Craigie Exquisite** 21053, bay, bred by Peter McAulay, Bow Farm, Greenock ; *s.* Craigie Excellence 19971, *d.* Craigie Mermaid 55394 *by* Craigie Litigant 19071.

Class 15.—*Clydesdale Stallions, born in* 1924.

98 **I. (£20, & Champion.)[2]**—James Kilpatrick, Craigie Mains, Kilmarnock, for **Craigie Ambition**, brown, bred by James Beaton, Mains of Glack, Pitcaple ; *s.* Bonnie Buchlyvie 14032, *d.* Lady Print 55108 *by* Dunure Footprint 15203.

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[1] Prizes given by the Shire Horse Society.

[2] Champion Silver Medal given by the Clydesdale Horse Society for the best Stallion in Classes 13 to 15.

99 **II. (£10.)**—Albert James Marshall, Bridgebank, Stranraer, for black, bred by G. and R. Findlater, Jerviswood Mains, Lanark; *s.* Dunure Footprint 15203, *d.* Nellie of Cornhills 54215 *by* Dandaleith Quest 19082.

101 **III. (£5.)**—Alexander Murdoch, East Hallside, Hallside, Cambuslang, by Glasgow, for **Hallside,** bay; *s.* Craigie McQuaid 20724, *d.* Ophelia 55513 *by* Craigie Litigant 19071.

Class 17.—*Clydesdale Fillies, born in* 1922.

104 **I. (£20, & Champion.[1])**—James Kilpatrick, Craigie Mains, Kilmarnock, for **Craigie Ella,** brown, bred by James Cairns, Abercrombie, Fife; *s.* Craigie Litigant 19071, *d.* Abercrombie Emma 47287 *by* Dunure Footprint 15203.

105 **II. (£10.)**—W. and J. Reith, Kennerty Farm, Peterculter, for **Dunure Real,** bay, bred by Robert Park, Brunstane, Portobello; *s.* Dunure Footprint 15203, *d.* Queenie of Brunstane 52802 *by* Auchenflower 12007.

Class 18.—*Clydesdale Fillies, born in* 1923.

111 **I. (£20, & R. N. for Champion.[1])**—Douglas D. Murray, The Dene, Seaham Harbour, for **Queen of Them All,** brown; *s.* Dunure Footprint 15203, *d.* Seaham Ideal 53907 *by* Auchenflower 12007.

108 **II. (£10.)**—Robert Dalziel, Rue, Holywood, by Auldgirth, for **Rue May Morn,** black; *s.* Dunure Footprint 15203, *d.* Noss Aida 44899 *by* Master David 15943.

113 **III. (£5.)**—Miss E. M. Reith, Kennerty Farm, Peterculter, for **Irene,** bay; *s.* Fyvie Sensation 20042, *d.* Dunure Destiny 54865 *by* Dunure Essential 19102.

106 **R. N.**—David Adams, Auchencraig, Dumbarton, for **Knockdon Gladys.**

H. C.—109.

Class 19.—*Clydesdale Fillies, born in* 1924.

115 **I. (£20.)**—Charles Aitkenhead, Carr House Farm, New Seaham, for **Dignity,** brown; *s.* Elford 20334, *d.* Bonnie Jean 44472 *by* Revelanta 11876.

117 **II. (£10.)**—Robert Dalziel, Rue, Holywood, by Auldgirth, for **Rue May Queen,** black; *s.* Balcairn Footnote 20701, *d.* Noss Aida 44899 *by* Master David 15943.

116 **III. (£5.)**—Archie Boadle, West End Farm, Flimby, Cumberland, for **Opulence,** bay, bred by James Young, Greenfield, Strathaven; *s.* Torrs Majestic 21138, *d.* Lady Astur 55736 *by* Dunure Footprint 15203.

Class 20.—*Clydesdale Geldings, by registered sires, born in or before* 1922.[2]

121 **I. (£20.)**—James Fleming, Barns of Claverhouse, Dundee, for **Bellringer,** brown, born in 1921, bred by John Bell, Tyrie Mains, Fraserburgh; *s.* Martino 18450.

123 **II. (£10.)**—William Kerr, Bell Mount, Penrith, for **Jeff,** brown, born on 1921, bred by Major Dudgeon, Cargen Holm, Dumfries; *s.* Bonnie Buchlyvie 14032.

124 **III. (£5.)**—Scottish Co-operative Wholesale Society, Ltd., 95, Morrison Street, Glasgow, for **Jock,** brown, born in 1921, bred by D. P. Elliot, Nisbet Hall, Duns; *s.* Scotland Victor 18108.

122 **R. N.**—James Fleming, for **Utility.**

H. C.—119.

Suffolks.

Class 21.—*Suffolk Stallions, born in or before* 1921.[3]

128 **I. (£20, & Champion.[4])**—Horace W. Packard, Overhall, Shotley, Ipswich, for **Hintlesham Agility** 4935, born in 1919, bred by S. Warth, Hintlesham, Suffolk; *s.* Morston Connaught 4590, *d.* Bawdsley Josephine 5426 *by* Cooks Napolian 2933.

130 **II. (£10, & R. N. for Champion.[4])**—P. C. Vestey, Easton Park, Wickham Market, for **Sudbourne Premier** 4963, chestnut, born in 1919, bred by the late Lord Manton, Sudbourne Hall, Suffolk; *s.* Sudbourne Beau Brocade 4235, *d.* Sudbourne Moonlight 8623 *by* Sudbourne Arabi 3287.

132 **III. (£5.)**—William Woodgate, Fairfield, Framlingham, for **Blackmore Hopeful** 5206, born in 1920, bred by E. H. Sikes, Ingatestone; *s.* Bawdsey Sickleman 4023, *d.* Grange Mermaid 8995 *by* Sudbourne Arabi 3287.

125 **R. N.**—James Forrest, Tattingstone Hall, Ipswich, for **Tattingstone Beau Esprit.**

H. C.—126.

Class 22.—*Suffolk Stallions, born in* 1922.

133 **I. (£20.)**—Frank J. Cullen, Cressing Temple, Braintree, for **Cressing Crusader** 5433; *s.* Framlingham Allenby 4826, *d.* Bawdsey Queen 9913 *by* Bawdsey Hay 4188.

135 **II. (£10.)**—A. T. Pratt, Morston Hall, Trimley, Ipswich, for **Morston Contract** 5442; *s.* Shotley Counterpart 4903, *d.* Morston Gold Gleam 10371 *by* Morston Gold Guard 4234.

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[1] Champion Silver Medal given by the Clydesdale Horse Society for the best Mare or Filly in Classes 16 to 19.

[2] Prizes given by the Clydesdale Horse Society.

[3] Prizes given by the Suffolk Horse Society.

[4] The "Coronation" Perpetual Silver Challenge Cup, value £50, given by the Suffolk Horse Society for the best Stallion in Classes 21 to 24.

Class 23.—*Suffolk Stallions, born in* 1923.

142 **I. (£20.)**—P. R. L. Savill, Copsale Court, Nuthurst, Sussex, for **Bawdsey Bountiful** 5551, bred by Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge; *s.* Framlingham Allenby 4826, *d.* Bawdsey Minerva 6449 *by* Bawdsey Harvester 3076.

143 **II. (£10.)**—Thomas H. Sochon, Tanfield Tye, West Hanningfield, Chelmsford, for **Morston Beau Brocade** 5555, bred by the Exors. of the late Lord Manton, Sudbourne Hall, Suffolk; *s.* Sudbourne Beau Brocade 4235, *d.* Moggy 8690 *by* Sudbourne Arab 3309.

138 **III. (£5.)**—Captain C. E. FitzRoy, The Lodge Farm, Coney Weston, Bury St. Edmunds, for **Darsham Sultan 2nd** 5592, bred by Capt. R. Catchpole, Darsham Hall, Suffolk; *s.* Darsham Marshman 4965, *d.* Darsham Sultanette 8310 *by* Darsham Sheik 4139.

140 **R. N.**—F. W. Horlock, Mistley House, Mistley, Essex, for **Mistley Heracles.**
H. C.—141.

Class 24.—*Suffolk Stallions, born in* 1924.

146 **I. (£20.)**—Captain C. E. FitzRoy, The Lodge Farm, Coney Weston, Bury St. Edmunds, for **Coney Weston Satellite** 5666; *s.* Sudbourne Arabi 3287, *d.* Daisy 3rd 8229 *by* Eldo Starkey 3762.

150 **II. (£10.)**—A. T. Pratt, Morston Hall, Trimley, Ipswich, for **Morston Gold King** 5643; *s.* Morston Gold Guard 4234, *d.* Leda's Queen 7772 *by* Bawdsey Harvester 3076.

149 **III. (£5.)**—A. T. Pratt, for **Morston Counter-Ring,** bred by the Exors. of the late Spencer Dawson, Stratton Hall, Ipswich; *s.* Shotley Counter-part 4903, *d.* Stratton Vera 6952 *by* Sproughton Gold Ring 3347.

151 **R. N.**—Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge, for **Bawdsey Ming.**
H. C.—148. **C.**—147.

Class 25.—*Suffolk Mares, with foals at foot.*

161 **I. (£20, & R. N. for Champion.[1])**—Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge, for **Bawdsey Porcelain** 10404, born in 1919 [foal *by* Framlingham Allenby 4826]; *s.* Earl Gray 4219, *d.* Bawdsey China Doll 2nd 7252 *by* Bentley War Cry 3028.

162 **II. (£10.)**—Sir Cuthbert Quilter, Bart., for **Bawdsey Sappho** 11350, born in 1921 [foal by Framlingham Allenby 4826]; *s.* Earl Gray 4219, *d.* Bawdsey Minerva 6449 *by* Bawdsey Harvester 3076.

163 **III. (£5.)**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Ashmoor Bessie** 10367, born in 1919 [foal *by* Framlingham Allenby 4826]; *s.* Sudbourne Arab 3309, *d.* Ashmoor Belle *by* Taylor's Majestic 3327.

164 **IV. (£4.)**—P. C. Vestey, Easton Park, Wickham Market, for **Sudbourne Gem** 10872, born in 1920 [foal *by* Woolverstone Checkmate 4683] 'bred by the late Lord Manton, Sudbourne Hall, Orford; *s.* Sudbourne Beau Brocade 4235, *d.* Diamond 9611 *by* Turner's Goldfinder 3011.

157 **R. N.**—Lieut.-Col. W. E. Harrison, O.B.E., Wychnor Park, Burton-on-Trent, for **Bawdsey Wench.**
H. C.—159.

Class 26.—*Suffolk Colt Foals, the produce of Mares in Class* 25.[2]

168 **I. (£10.)**—Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge, for foal born Feb. 15; *s.* Framlingham Allenby 4826, *d.* Bawdsey Porcelain 10404 *by* Earl Gray 4219.

167 **II. (£5.)**—Sir Cuthbert Quilter, Bart., for foal born Feb. 1; *s.* Framlingham Allenby 4826, *d.* Bawdsey Hayseed 9496 *by* Bawdsey Hay 4188.

169 **III. (£3.)**—Sir Cuthbert Quilter, Bart., for foal born March 18; *s.* Framlingham Allenby 4826, *d.* Bawdsey Sappho 11350 *by* Earl Gray 4219.

Class 27.—*Suffolk Filly Foals, the produce of Mares in Class* 25.[2]

174 **I. (£10.)**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Ashmoor Berry,** born Feb. 19; *s.* Framlingham Allenby 4826, *d.* Ashmoor Bessie 10367 *by* Sudbourne Arab 3309.

172 **II. (£5.)**—Lieut.-Col. W. E. Harrison, O.B.E., Wychnor Park, Burton-on-Trent, for **Wychnor Wendy,** born March 25; *s.* Bawdsey Wassail 5132, *d.* Bawdsey Wench 10825 *by* Bawdsey Varlet 4390.

173 **III. (£3.)**—A. Preston Jones, Mickleover House, Derby, for **Mickleover Sunshine,** born March 15; *s.* Horstead Punchinello 5096, *d.* Sudbourne Moonlight 8623 *by* Sudbourne Peter 3955.

Class 28.—*Suffolk Fillies, born in* 1922.

180 **I. (£20, & Champion.[1])**—A. T. Pratt, Morston Hall, Trimley, Ipswich, for **Morston Gold Choice** 12070; *s.* Morston Gold Guard 4234, *d.* Golden Lass 8614 *by* Rendlesham Steward 4137.

177 **II. (£10.)**—W. J. Fryer, Holme Park, Sonning, Reading, for **Sudbourne Sybil** 12146, bred by the Exors. of the late Lord Manton; *s.* Sudbourne Merryman 5062, *d.* Sudbourne Cybele 10001 *by* Sudbourne Beau Brocade 4235.

181 **III. (£5.)**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Walpole Majolica** 11707, bred by Miss M. Gillett, Walpole, Halesworth; *s.* Samford Rufus 4712, *d.* Walpole Monica 8949 *by* Sudbourne Arabi 3287.

178 **R. N.**—Saxton W. A. Noble, Wretham Hall, Thetford, for **Wretham Fuchia.**

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[1] Champion Prize of £10 given by the Suffolk Horse Society for the best Mare or Filly in Classes 25, 28, 29 and 30.

[2] Prizes given by the Suffolk Horse Society.

Class 29.—*Suffolk Fillies, born in* 1923.

187 **I. (£20.)**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Bromeswell Patricia** 12289, bred by H. King, Bromeswell, Suffolk; *s.* Sudbourne Arab 3309, *d.* Bromeswell Stella 10289 *by* Framlingham Joffres 4425.
184 **II. (£10.)**—W. N. L. Champion, Riddlesworth Hall, Thetford, for **Riddlesworth Barmaid**, 12480, bred by the Exors. of the late Lord Manton, Sudbourne Hall; *s.* Sudbourne Beau Brocade 4235, *d.* Sudbourne Armada 8519 *by* Sudbourne Peter 3955.
185 **III. (£5.)**—Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge, for **Bawdsey Haysel** 12598; *s.* Framlingham Allenby 4826, *d.* Bawdsey Hayseed 9496 *by* Bawdsey Hay 4188.
189 **R. N.**—A. G. Welch, Worlingham, Beccles, for **Worlingham Stella.**
H. C.—190. **C.**—188.

Class 30.—*Suffolk Fillies, born in* 1924.

199 **I. (£20.)**—P. C. Vestey, Easton Park, Wickham Market, for **Martley Prima Donna** *s.* Sudbourne Premier 4963, *d.* Ringshall Cavell 10083 *by* Freston Marshal 4420.
191 **II. (£10.)**—Captain C. E. FitzRoy, The Lodge Farm, Coney Weston, Bury St. Edmunds, for **Coney Weston Arabis** 12970; *s.* Sudbourne Arabi 3287, *d.* Starlight 2nd 10218 *by* Sudbourne Peter Pan 4214.
200 **III. (£5.)**—A. G. Welch, Worlingham, Beccles, for **Worlingham La Belle Reine** 12871; *s.* Sudbourne Foch 4869, *d.* La Belle Rouge 10611 *by* Sudbourne Beauchief 4215.
201 **IV. (£4.)**—T. W. Wilson & Sons, Ltd., Hadleigh, Suffolk, for **Hadleigh Juno** 12985; *s.* Ashmoor Cornsheaf 5286, *d.* Hadleigh Rose 10378 *by* Morston Wallace 3987.
195 **R. N.**—The Rt. Hon. Sir William Joynson Hicks, Bart., M.P., 70, Queen's Gate, London, S.W.7, for **Tacolneston Marchioness.**
H. C.—193. **C.**—192, 196.

Class 31.—*Suffolk Geldings, by registered sires, born in or before* 1922.[1]

206 **I. (£20.)**—Mrs. Evelyn Rich, The Grays Stud Farm, Westerham Hill, for **Colonel**, born in 1919, bred by Stephen Jackson, Hadleigh, Suffolk; *s.* Woolverstone Flash Cadet 4695, *d.* Scott 6279.
209 **II. (£10.)**—P. C. Vestey, Easton Park, Wickham Market, for **Duke**, born in 1920, bred by E. H. Reynolds, Hoxne Place, Denham; *s.* Sudbourne Peter Pan 4214, *d.* Burton Maid 8527.
205 **III. (£5.)**—Mrs. Evelyn Rich, for **Captain**, born in 1920, bred by F. C. Burton, Grove Farm, Kessingland; *s.* Matchless 4628, *d.* Dainty 8469.
204 **R. N.**—Sir Cuthbert Quilter, Bart., Bawdsey, Woodbridge, for **Peter.**
H. C.—208. **C.**—203.

Percherons.

Class 32.—*Percheron Stallions, born in or before* 1921.[2]

210 **I. (£20.)**—Aubrey W. Handy, Haycroft, Sherborne, Northleach, for **River Voussoir** B 132, grey, born in 1921; *s.* Onuphre B 43, *d.* Doris B 127 *by* Artemus A 73339.

Class 33.—*Percheron Stallions, born in* 1922.

214 **I. (£20, & Champion.[3])**—Henry R. Overman, Brampton Ash, Market Harborough, for **Hilderstone Watteau** B 198, grey, bred by H. Sidebottom, Lanwades, Kennet, Newmarket; *s.* Misanthrope B 5, *d.* Ruchee B 296 *by* Nichet F 117897.
211 **II. (£10, & R. N. for Champion.[3])**—Thomas Cook, Hobland House, Bradwell, Great Yarmouth, for **Hobland Dragon** B 219, grey; *s.* Perfection B 46, *d.* Sonorite B 343 *by* Ohio F 119742.
212 **III. (£5.)**—Guy Fenwick, North Luffenham Hall, Stamford, for **Hobland Demon** B 218, grey, bred by Thomas Cook, Hobland House, Bradwell; *s.* Perfection B 46, *d.* Quanuse B 57 *by* Lycaon F 103544.
213 **R. N.**—Col. H. E. Hambro, C.B.E., Coldham Hall, Bury St. Edmunds, for **Coldham Gunner.**

Class 34.—*Percheron Stallions, born in* 1923.

215 **I. (£20, & Champion.[4])**—Stanley M. Dennis, Sharnden Manor, Mayfield, Sussex, for **Sharnden Achille** B 233, black grey; *s.* Lagor B 1, *d.* Quartelette B 19 *by* Limon F 99810.
216 **II. (£10, & R. N. for Champion.[4])**—Miss R. M. Harrison, O.B.E., Maer Hall, Newcastle, Staffs, for **Romah Gamgee** B 245, iron grey; *s.* Misanthrope B 5, *d.* Quolline B 297 *by* Lyonnais F 102760.
217 **III. (£5.)**—W. E. Swinnerton, Manor House, Over Whitacre, Birmingham, for **Greyling X** B 221, grey, bred by Mrs. Robert Emmet, Moreton Paddocks; *s.* Rhum B 53, *d.* Quonjointe B 220 *by* Myrmidon F 109533.

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[1] Prizes given by the Suffolk Horse Society.

[2] Prizes given by the British Percheron Horse Society.

[3] Perpetual Silver Challenge Cup, value Fifty Guineas, given by the British Percheron Horse Society for the best Stallion in Classes 32 to 35.

[4] Perpetual Silver Challenge Cup, value Fifty Guineas, given by the British Percheron Horse Society for the best Stallion in Class 34 born in Great Britain.

Class 35.—*Percheron Stallions, born in* 1924.

218 **I. (£20.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Histon Drayman 3rd** B 317, grey; *s.* Trapeze F 140424, *d.* Unification B 535 *by* Manillon F 110245.

219 **II. (£10.)**—Major J. S. Courtauld, M.C., M.P., Burton Park, Petworth, Sussex, for **Burton Yeoman** B 308, dark grey; *s.* Rhum B 53, *d.* Qualamite B 5 *by* Lyonnais F 102706.

223 **III. (£5.)**—Charles Wilson, Riseholme, Lincoln, for **Riseholme Simon** B 314, grey; *s.* Bargaly Chieftain B 16, *d.* Siamoise B 328 *by* Nihiliste F 117694.

221 **R. N.**—Mrs. Robert Emmet, Moreton Paddox, Moreton Morrell, Warwick, for **Greyling Cointreau.**

Class 36.—*Percheron Mares, with foals at foot.*

228 **I. (£20, & Champion.[1])**—Major J. S. Courtauld, M.C., M.P., Burton Park, Petworth, Sussex, for **Qualamite** B 4, light grey, born in 1916 [foal *by* Quanteleux B 35], bred by M. Breux, la Cour, Marners, la Sarthe, France; *s.* Lyonnais F 102760, *d.* Montre F 106607 *by* Iberien F 81155.

230 **II. (£10, & R. N. for Champion.[1])**—Miss R. M. Harrison, O.B.E., Maer Hall, Newcastle, Staffs, for **Quitana** B 90, grey, born in 1916 [foal *by* Ortho B 22], bred by M. Chopin, Chemille, Mortagne, France; *s.* Lagor F 100512, *d.* Mazurka F 105941 *by* Huchoir F 77760.

225 **III. (£5.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Ogive** B 496, grey, born in 1914 [foal *by* Lagor B 1], bred by M. P. Chalopin, La Garune, Roullee, France; *s.* Instar F 78857, *d.* Pascaline F 60020 *by* Glacial F 44984.

226 **IV. (£4.)**—Chivers & Sons, Ltd., for **Petronne** B 176, grey, born in 1915 [foal *by* Villabon B 276], bred by M. Louvre, La Reiniere, Mortagne, France; *s.* Japon F 84819, *d.* Hebe F 77119 *by* Megrillon F 59997.

229 **R. N.**—Guy Fenwick, North Luffenham Hall, Stamford, for **Sarre.**

Class 37.—*Percheron Colt or Filly Foals, the produce of Mares in Class* 36.[2]

237 **I. (£10.)**—Chivers & Son, Ltd., Histon, Cambridge, for grey filly, born March 16; *s.* Villabon B 276, *d.* Petronne B 176 *by* Japon F 84819.

240 **II. (£5.)**—Guy Fenwick, North Luffenham Hall, Stamford, for grey colt, born April 7; *s.* Misanthrope B 5, *d.* Sarre B 326 *by* Napoleon F 114031.

241 **III. (£3.)**—Miss R. M. Harrison, O.B.E., Maer Hall, Newcastle, Staffs, for black filly, born March 30; *s.* Ortho B 22, *d.* Quitana B 90 *by* Lagor F 100512.

239 **R. N.**—Major J. S. Courtauld, M.C., M.P., Burton Park, Petworth, Sussex.

Class 38.—*Percheron Fillies, born in* 1922.

248 **I. (£20.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Greyling Welcome** B 443, grey, bred by Mrs. Robert Emmet, Moreton Paddox, Moreton Morrell; *s.* Rhum B 53, *d.* Reversion B 349 *by* Noyal F 117498.

247 **II. (£10.)**—Chivers & Sons, Ltd., for **Argenteuse** B 591, dark grey, bred by M. Gasselin, La Martinière, Mortagne, France; *s.* Remords F 133354, *d.* Litorne F 100791 *by* Hérold F 74198.

250 **III. (£5.)**—Mrs. M. M. FitzGerald, Marsden Manor, Cirencester, for **Marsden Ambrosine** B 446, grey; *s.* Quanteleux B 35, *d.* Ratissoire B 263 *by* Nectaire F 112697.

Class 39.—*Percheron Fillies, born in* 1923.

251 **I. (£20.)**—Captain Robert B. Brassey, Cottesbrooke Hall, Northampton, for **Blagueuse** B 662, grey, bred by M. Leprince, Villeneuque, l'Hermitiere, France; *s.* Pelisser F 126603, *d.* Marinette F 105332 *by* Gazeo F 70937.

254 **II. (£10, & Champion.[3])**—Dinam Estates Co., Llandinam Hall Farm, Llandinam, Mont., for **Dinam Fouriciéré** B. 580, dark grey; *s.* Prescient B 17, *d.* Sourdiere B 319 *by* Nigand F 111585.

257 **III. (£5, & R. N. for Champion.[3])**—Charles Wilson, Riseholme, Lincoln, for **Riseholme Siren** B 504, grey; *s.* Misanthrope B 5, *d.* Siamoise B 328 *by* Nihiliste F 117694.

255 **R. N.**—Dinam Estates Co., for **Dinam Quotité.**

Class 40.—*Percheron Fillies, born in* 1924.

259 **I. (£20.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Histon Bess** B 641, grey; *s.* Oh B 58, *d.* Perthe B 178 *by* Japon F 84819.

261 **II. (£10.)**—Guy Fenwick, North Luffenham Hall, Stamford, for **Luffenham Lorna** B 608, grey; *s.* Ombrien B 15, *d.* Lorene B 138 *by* Appleton A 101534.

258 **III. (£5.)**—Captain Robert B. Brassey, Cottesbrooke Hall, Northampton, for **Cottesbrooke Eirene** B 610, grey; *s.* Onuphre B 43, *d.* Edna B 418 *by* Forfait King F 104637.

260 **R. N.**—Dinam Estates Co., Llandinam Hall Farm, Llandinam, for **Dinam Savoie.**

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[1] Perpetual Silver Challenge Cup, value Fifty Guineas, given by the British Percheron Horse Society for the best Mare or Filly in Classes 36, 38, 39 and 40.

[2] Prizes given by the British Percheron Horse Society.

[3] Perpetual Silver Challenge Cup, value Fifty Guineas, given by the British Percheron Horse Society for the best Filly in Class 39 born in Great Britain.

Hunters.

Class 41.—*Hunter Mares, with foals at foot.*

271 **I. (£20, & Champion.[1])**—WARRE & UNWIN, Longdon Hall, Tewkesbury, for **Cavallini**, bay, born in 1915 [foal *by* Rochester].

262 **II. (£10, & R. N. for Champion.[1])**—LIEUT.-COL. SIR MERRIK R. BURRELL, BART., C.B.E., Knepp Castle, Horsham, for 5330 **The Belle**, brown, born in 1916 [foal *by* The Best 147], *s.* Hanover Square, *d.* 3014 Surprise *by* Silver King 54.

266 **III. (£5.)**—WALTER J. FRYER, C.B.E., Holme Park, Sonning, Berks, for **5847 Larch**, bay, born in 1911 [foal *by* Tantamount], bred by Lieut.-Col. Meysey Thompson, Knaresborough, Yorks; *s.* Birk Gill 178, *d.* Britannia *by* Prince Vortimer.

269 **R. N.**—LADY TERRINGTON, Springfield, Marlow, Bucks, for **Lady B.**

Class 42.—*Hunter Colt Foals, the produce of Mares in Class* 41.

275 **I. (£10).**—WALTER J. FRYER, C.B.E , Holme Park, Sonning, Berks, for **Tanlarch**, brown, born March 30; *s.* Tantamount, *d.* 5847 Larch *by* Birk Gill 178.

274 **II. (£5.)**—W. LINDSAY EVERARD, M.P., Ratcliffe Hall, Leicester, for chestnut, born May 18; *s.* Sysonby, *d.* Brown Sugar.

277 **III. (£3.)**—LADY TERRINGTON, Springfield, Marlow, Bucks, for brown, born May 21; *s.* Baydrop, *d.* 5980 Lady B *by* Captivation.

Class 43.—*Hunter Filly Foals, the produce of Mares in Class* 41.

286 **I. (£10.)**—WARRE & UNWIN, Longdon Hall, Tewkesbury, for brown, born May 16; *s.* Rochester, *d.* Cavallini *by* Long Tom.

283 **II. (£5.)**—H. S. ROBSON SCOTT, Hightown Hill, Ringwood, Hants, for **6448 Lady Butler**, chestnut, born April 12; *s.* Baydrop, *d.* 6435 Optimist.

Class 44.—*Hunter Mares (Novice) with foals at foot.*

288 **I. (£20.)**—LIEUT.-COL. SIR MERRIK R. BURRELL, BART., C.B.E., Knepp Castle, Horsham, for 5739 **Blood Ruby**, brown, born in 1918 [foal *by* Valens]; *s.* The Best, 147, *d.* 3201 Princess Ruby *by* Red Prince.

292 **II. (£10.)**—HARRY MASON, Kynnersley Manor, Wellington, Salop, for **Seagull**, grey, born in 1916 [foal *by* Lord Beaupré], bred in Ireland.

296 **III. (£5.)**—WARRE & UNWIN, Longdon Hall, Tewkesbury, for **Prima Donna**, grey, born in 1920 [foal *by* Kildare 2nd], bred by Geoff. Kenyon, Haxby, Yorks; *s.* Primary, *d.* 5792 Beauty Darling *by* Butterscotch.

290 **IV. (£4.)**—BRIG.-GENERAL R. M. FOOT, C.B., C.M.G., D.S.O., White Hill, Berkhamsted, for 6011 **Jacqueline**, bay, born in 1920 [foal *by* Chanteur]; *s.* Captain Jack 158, *d.* 3606 Norah 4th *by* Red Sahib 75.

294 **R. N.**—T. B. NUNNERLEY, The Twemlows, Whitchurch, Salop, for **Betty Moss.**

Class 45.—*Hunter Colt Foals, the produce of Mares in Class* 44.

301 **I. (£10.)**—MRS. JOSEPH WIDGER, Beech Hill, West Derby, Liverpool, for **Jubilee**, chestnut, born May 9; *s.* Manxman, *d.* Mistletoe *by* Woodstock.

299 **II. (£5.)**—T. B. NUNNERLEY, The Twemlows, Whitchurch, Salop, for chestnut, born April 23; *s.* Lord Beaupre, *d.* Betty Moss *by* Neyland 175.

300 **III. (£3.)**—WARRE & UNWIN, Longdon Hall, Tewkesbury, for grey, born April 18; *s.* Kildare 2nd, *d.* Prima Donna *by* Primary.

Class 46.—*Hunter Filly Foals, the produce of Mares in Class* 44.

280 **I. (£10.)**—LIEUT.-COL. SIR MERRIK R. BURRELL, BART., C.B.E., Knepp Castle, Horsham, for bay, born May 1; *s.* Valens, *d.* 5739 Blood Ruby *by* The Best 147.

306 **II. (£5.)**—WARRE & UNWIN, Longdon Hall, Tewkesbury, for chestnut, born March 23; *s.* Viceroy, *d.* Bellemir.

304 **III. (£3.)**—BRIG.-GENERAL R. M. FOOT, C.B., C.M.G., D.S.O., White Hill, Berkhamsted, for 6452 **Bridal Chant**, chestnut, born March 30; *s.* Chanteur, *d.* 6011 Jacqueline *by* Captain Jack 158.

Class 47.—*Hunter Fillies, born in* 1922.

308 **I. (£20.)**—MAJOR GORDON B. FOSTER, Nawton Towers, Nawton, Yorks, for **Holme Belle**, bay; *s.* Dunholme, *d.* Rosscommon Belle *by* Broxton.

307 **II. (£10.)**—W. B. BROWN, Southolme, Slingsby, Malton, for **Joy Girl**, chestnut; *s.* Jovial, *d.* Proud Mary *by* Proudridge.

311 **III. (£5.)**—DAVID LLEWELLYN JENKINS, Boverton Place, Llantwit Major, Cardiff, for 6365 **Glittering Gold**, chestnut; *s.* Jingling Georgie, *d.* 6364 Golden Lady *by* Bachelor's Charm 163.

310 **R. N.**—F. W. B. GUBBINS, Swalcliffe Park, Banbury, for **Rawnie.**

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[1] Champion Gold Medal given by the Hunters' Improvement and National Light Horse Breeding Society for the best Mare four years old and upwards in Classes 41 and 44, which must be either registered in the Hunter Stud Book, or the entry tendered within a month of the Award.

Class 48.—*Hunter Fillies, born in* 1923.

314 **I. (£20, & R. N. for Champion.[1])**—Mrs. M. Chaunter, Webbery, Bideford, for 6387 **Ginger. Jane**, chestnut; *s.* Forum, *d.* 6386 Katie 2nd *by* Red Prince 2nd.

313 **II. (£10.)**—Major Clive Behrens, Swinton Grange, Malton, for 6207 **Hecuba 2nd**, bay; *s.* Crathorne, *d.* 4106 Heather 3rd *by* Scotch Sign.

318 **III. (£5.)**—H. S. Robson Scott, Hightown Hill, Ringwood, for 6436 **Ragwort**, chestnut; *s.* Ragged Robin, *d.* 6435 Optimist.

317 **R. N.**—Harry Mason, Kynnersley Manor, Wellington, Salop, for **May Day.**

Class 49.—*Hunter Fillies, born in* 1924.

319 **I. (£20, & Champion.[1])**—W. B. Brown, Southolme, Slingsby, Malton, for **Home Proud**, chestnut; *s.* Dunholme, *d.* Proud Mary *by* Proudridge.

320 **II. (£10.)**—Lieut.-Col. Sir Merrik R. Burrell, Bart., C.B.E., Knepp Castle, Horsham, for **Chime**, brown; *s.* The Best 147, *d.* 5330 The Belle *by* Hanover Square.

328 **III. (£5.)**—E. D. Newman, Scremby Manor, Spilsby, for 6385 **Mazura**, bay; *s.* Top Covert, *d.* 4973 Miss Barock *by* Akbar.

322 **R. N.**—Walter J. Fryer, C.B.E., Holme Park, Sonning, Berks, for **Gaylarch.**
H. C.—321.

Class 50.—*Hunter Geldings, born in* 1922.

338. **I. (£20.)**—Miss R. M. Harrison, O.B.E., Maer Hall, Newcastle, Staffs, for **Jester 2nd** (Supp. No. 677), bay; *s.* Hunty Gowk 186, *d.* 6231 Miss Hutsby *by* Bedlington.

331 **II. (£10.)**—G. P. and H. M. Ballard, Strawmoor, Oaken, Wolverhampton, for **Hector**, chestnut; *s.* King Midas, *d.* 636 Miss Heston *by* Heston.

341 **III. (£5.)**—Major Walter H. Rawnsley, Well Vale, Alford, Lincs, for **Top o' the Vale** (Supp No. 803), chestnut, bred by E. Davy, Dalby, Spilsby; *s.* Top Covert.

335 **IV. (£4.)**—E. J Glaze, The Firs, Four Oaks, Warwickshire, for **King's Counsel** (Supp. No. 708), bay, bred by H. L. Storey, Malmesbury; *s.* Rathurde, *d.* Bessie *by* Astrologer

334 **R. N.**—Major Gordon B. Foster, Nawton Towers, Nawton, Yorks, for **Dunton.**
H. C.—332, 333, 336. **C.**—339.

Class 51.—*Hunter Geldings, born in* 1923.

346 **I. (£20.)**—Major H. C. Meredith, Broadward Hall, Aston-on-Clun, Salop, for **Baylad** (Supp. No. 784), brown; *s.* Baydrop, *d.* 5980 Lady B *by* Captivation.

347 **II. (£10.)**—Major Walter H. Rawnsley, Well Vale, Alford, Lincs, for **Tarpaulin** (Supp. No. 795), bay; *s.* Top Covert, *d.* 5470 Mermaid 8th *by* Ocean Wave.

345 **III. (£5.)**—McMorran Brothers, Aston Cottage, Aston, Nantwich, for **Catch Me** (Supp. No. 8113), chestnut; *s.* Landgrave, *d.* Bridle Way *by* General Symons.

342 **R. N.**—Major Clive Behrens, Swinton Grange, Malton, for **Prince Harry.**
H. C.—343.

Class 52.—*Hunter Colts or Geldings, born in* 1924.

349 **I. (£20.)**—G. P. and H. M. Ballard, Strawmoor, Oaken, Wolverhampton, for **Gentleman Robert**, chestnut colt; *s.* King Midas, *d.* 6362 Miss Heston *by* Heston.

355 **II. (£10.)**—Mrs. Evelyn Rich, The Grays Stud Farm, Westerham Hill, Kent, for **Ben Lomond**, chestnut colt, bred by the Middleton Park Stud, Ireland; *s.* Lomond, *d.* Maria *by* Marco.

350 **III. (£5.)**—Major Clive Behrens, Swinton Grange, Malton, for **Full Cry**, bay gelding; *s.* Aynsley, *d.* 6151 Flemish Queen *by* Pericles.

354 **R. N.**—Captain Owen Peel, Abbeygate, Bangor-on-Dee, North Wales, for **By Command.**

Polo and Riding Ponies.

Class 53.—*Polo and Riding Pony Stallions, born in or before* 1920, *not exceeding* 15 *hands.*

359 **I. (£15, & R. N. for Champion.[2])**—Thomas James Hillman, Stud Farm, Stock Wood, Redditch, for **Tom Webster** 1199, bay, born in 1918, bred by Messrs. Botterill; *s.* Desman (Vol. 21, p. 357), *d.* Star Diamond (Vol. 20, p. 875) *by* Orion.

358 **II. (£10.)**—Miss B. G. Cory-Wright, Ayot Place, Welwyn, Herts, for **St. Lucion** 1018, dark bay, born in 1917, bred by J. R. B. Branson, Headley Mill Farm, Bordon, Hants; *s.* Decision, *d.* St. Lucia *by* St. Angelo.

Class 54.—*Polo and Riding Pony Stallions, born in* 1921 *or* 1922, *not exceeding* 15 *hands.*

363 **I. (£15, & Champion.[2])**—Captain W. H. France-Hayhurst, Bostock Hall, Middlewich, for **Rosewood** 1314, chestnut, born in 1921; *s.* Tantamount (Vol. 22, p. 707), *d.* 4169 Lady Brilliant *by* Field-Marshal 512.

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[1] Champion Gold Medal given by the Hunters' Improvement and National Light Horse Breeding Society for the best Filly not exceeding three years old in Classes 47 to 49, which must be either registered in the Hunter Stud Book, or the entry tendered within a month of the Award.

[2] Champion Gold Medal given by the National Pony Society for the best Stallion in Classes 53 and 54.

361 **II. (£10.)**—Herbert Bright, The Cove, Silverdale, Carnforth, for **Silverdale Cheerio** 1320, bay, born in 1921, bred by Capt. Noel H. Wills, Misarden Park, Cirencester; *s.* Cherry Tint 761, *d.* 4168 Silvery 2nd *by* Right For'ard 368.

366 **III. (£5.)**—Lady Penrhyn, Wicken Park, Stony Stratford, for **Friar** (Supp. 1922), black, born in 1922; *s.* Prince Friarstown (Supp. 1917), *d.* Hannah Ann (Approved Mare Register, p. 45) *by* Chari.

Class 55.—*Polo and Riding Pony Mares, with foals at foot, not exceeding* 15 *hands.*

372 **I. (£15, & Champion.[1])**—Tresham Gilbey, Whitehall, Bishop's Stortford, for **Rusty** (Approved Mare Register, p. 33), chestnut, aged [foal *by* Wild Tint 1207].

368 **II. (£10, R. N. for Champion,[1] & Champion.[2])**—Herbert Bright, The Cove, Silverdale, Carnforth, for 4168 **Silvery, 2nd**, brown, born in 1914 [foal *by* Cherry Tint], bred by the late Sir John Barker, Bart., Bishop's Stortford; *s.* Right For'ard 368, *d.* Silver Queen *by* Sandiway.

373 **III. (£5, & R. N. for Champion.[2])**—R. H Reynolds, Villa Verde, South Downs Road, Bowdon, for 4178 **New Love**, bay, born in 1917 [foal *by* Complexion 1016], bred by Mrs. Oscar Muntz, Horrabridge, Devon; *s.* Arthur Pride 861, *d.* 2435 Old Love *by* Goring Health (Vol. 20, p. 882).

370 **IV. (£4.)**—Captain W. H. France-Hayhurst, Bostock 'Hall, Middlewich, for 4900 **Coronet**, chestnut, born in 1920 [foal *by* Rosewood 1314]; *s.* Little Corona 814, *d.* 5032 Juliet 2nd *by* Sandiway 121.

371 **R. N.**—Captain W. H. France-Hayhurst, for **Lady Brilliant.**

Class 56.—*Polo and Riding Pony Fillies or Geldings, born in* 1922.

378 **I. (£15.)**—Tresham Gilbey, Whitehall, Bishop's Stortford, for **Crofter**, brown gelding bred by R. P. Croft, St. Margarets, Ware, Herts; *s.* Reform 1002, *d.* 2116 Kitty Spark.

376. **II. (£10, & Champion.[3])**—Herbert Bright, The Cove, Silverdale, Carnforth, for **Silverdale Betula** (Supp. 1922), brown filly; *s.* Cherry Tint 761, *d.* 4168 Silvery 2nd *by* Right For'ard 368.

377 **III. (£5.)**—Captain W. H. France-Hayhurst, Bostock Hall, Middlewich, for **Roseleaf 2nd** (Supp. 1922), chestnut filly; *s.* St. Petersburgh (Vol. 21, p. 479), *d.* 4169 Lady Brilliant *by* Field-Marshal 512.

380 **R. N.**—C. Howard Taylor, Middlewood Hall, Barnsley, for **Cinderella 2nd.**

Class 57.—*Polo and Riding Pony Colts, Fillies or Geldings, born in* 1923.

383 **I. (£15.)**—Herbert Bright, The Cove, Silverdale, Carnforth, for **Silverdale Loyalty** (Supp. 1923), brown colt; *s.* Prince Friarstown (Supp. 1917), *d.* 4168 Silvery 2nd *by* Right For'ard 368.

386 **II. (£10, & R. N. for Champion.[3])**—Tresham Gilbey, Whitehall, Bishop's Stortford, for **Dairy Maid** (Supp. 1923), chestnut filly; *s.* Reform 1002, *d.* 3992 Waiting Maid *by* Arthur D 593.

382 **III. (£5.)**—Herbert Bright for **Jazz Band** (Supp. 1923), bay colt, bred by Henry H. T. S. Tufton, Bletchingley, Surrey; *s.* Reform 1002, *d.* Dolly 12th (Approved Mare Register, p. 44).

385 **IV. (£4.)**—Captain W. H. France-Hayhurst, Bostock Hall, Middlewich, for **Rosette 4th** (Supp. 1923), chestnut filly; *s.* French Eagle (Vol. 22, p. 505), *d.* 4169 Lady Brilliant *by* Field-Marshal 512.

387 **R. N.**—Lady Penrhyn, Wicken Park, Stony Stratford, for **Susannah.**

Class 58.—*Polo and Riding Pony Colts, Fillies or Geldings, born in* 1924.

392 **I. (£15.)**—Captain W. H. France-Hayhurst, Bostock Hall, Middlewich, for **Rosarian** (Supp. 1924), dark bay colt; *s.* Rosewood 1314, *d.* 5032 Juliet 2nd *by* Sandiway 121.

393 **II. (£10.)**—Captain W. H. France-Hayhurst, for **Rose D'Or** (Supp. 1924), chestnut colt; *s.* Great Surprise (Vol. 21, p. 34), *d.* 4169 Lady Brilliant *by* Field-Marshal 512.

391 **III. (£5.)**—Miss B. G. Cory-Wright, Ayot Place Welwyn, Herts, for **Cherry Sauce** (Supp. 1924), chestnut gelding; *s.* Cherry Tint 761, *d.* Beano 2nd (Approved Mare Register, p. 63).

394 **R. N.**—Tresham Gilbey, Whitehall, Bishop's Stortford, for **Red Dawn.**

Arabs.

Class 59.—*Arab Stallions, any age.*

395 **I. (£15, & Champion.[4])**—Edward Dillon O'Grady Clarke, Ibornden Park Stud, Biddenden, Kent, for **Feluja** 8281, dark brown, born in 1915, bred by Fedaan Anazeh Tribe.

396 **II. (£10, & R. N. for Champion.[4])**—Edward Dillon O'Grady Clarke, for **Koheilan** 8216, flea-bitten grey, born in 1912, bred by the late Emir Ibn Raschid of Hail, Nejd.

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[1] Champion Gold Medal given by the National Pony Society for the best Mare or Filly in Classes 55 to 58.

[2] Bronze Medal given by the National Pony Society for the best Foal in Class 55 entered in the Supplement to the National Pony Stud Book.

[3] Champion Silver Medal given by the National Pony Society for the best Filly in Classes 56 to 58.

[4] Gold Medal given by the Arab Horse Society for the best Stallion in Class 59.

Hackneys.

Class 60.—*Hackney Stallions, born in or before* 1921, *over* 14 *hands.*

399 **I. (£15, & Champion.[1])**—Henry T. Holloway, West Lavington, Wiltshire, for **Lavington Viceroy** 13960, dark chestnut, born in 1921; *s.* Adbolton Kingmaker 12274, *d.* 22988 Aphrodite Danum *by* Copmanthorpe Performer 9670.

398 **II. (£10.)**—Tom Percy Flower 257, East Park Road, Leicester, for **Proctor's Boy** 13291, chestnut, born in 1914, bred by Enoch Glen, Kaim Park, Bathgate; *s.* King's Proctor 11102, *d.* 17525 Lochryan Mermaid *by* Lord Hilston 6820.

Class 61.—*Hackney Stallions, born in* 1922 *or* 1923.

402 **I. (£15, & R. N. for Champion.[1])**—Hubert Groom, Warham, Wells, Norfolk, for **Docking Viscount** 14221, chestnut, born in 1922; *s.* Leopard 9783, *d.* 25536 Creake Viscountess *by* Creake Viscount 12346.

401 **II. (£10.)**—J. W. Featherby, Field House, Harswell, York, for **Overton Sensation** 14266, chestnut, born in 1922, bred by Thomas Harrison, Overton, Skelton, Yorks; *s.* Bertrano 13288, *d.* 26182 Overton Queen *by* Garrowby Denmark 12628.

403 **III. (£5.)**—Henry T. Holloway, West Lavington, Wiltshire, for **Lavington Firebrand** 14063, brown, born in 1922, bred by Malcolm Sinclair, The Paddocks, Mill Hill, N.W.; *s.* Bertrano 13288, *d.* 16699 Hollin Flame *by* Norbury Lightning 7563.

Class 62.—*Hackney Mares, with foals at foot.*

406 **I. (£15, & Champion.[2])**—Sir Lees Knowles, Bart., C.V.O., O.B.E., Westwood, Pendlebury, Manchester, for 23769 **Slashing Dorothy**, chestnut, born in 1914 [foal *by* Bertrano 13288], bred by the late Sir Walter Gilbey, Bart., Elsenham Hall, Essex; *s.* Antonius 10559, *d.* 19088 Flash Dorothy *by* Forest Star 7445.

404 **II. (£10, & R. N. for Champion.[2])**—Theo. Hignett, St. Ives, Sandfield Park, West Derby, Liverpool, for 25024 **Angram Express**, chestnut, born in 1919 [foal *by* Bertrano 13288], bred by G. R. Ditchburn, Lodge Farm, Thorganby, York; *s.* Angram Majesty 11967, *d.* 24645 Thorganby Princess *by* Parkhouse Chantecler 11843.

407 **III. (£5.)**—Mrs. E. M. Slough, Oakdene, Byng Road, High Barnet, for 25026 **Capenor Adelaide**, chestnut, born in 1919 [foal *by* Bertrano 13288], bred by Henty B. Brandt, Capenor Nutfield, Surrey; *s.* Capenor Addenda 12979, *d.* 18698 Treasure Trove *by* Goldfinder 6th 1791.

405 **R. N.**—W. M. Killick, Hankelow Court, Hankelow, Nantwich, for **Shavington Princess Parade.**

Class 63.—*Hackney Colt or Filly Foals, the produce of Mares in Class* 62.

410 **I. (£10.)**—Sir Lees Knowles, Bart., C.V.O., O.B.E., Westwood, Pendlebury, Manchester, for chestnut filly, born April 6, 1925; *s.* Bertrano 13288, *d.* 23769 Slashing Dorothy *by* Antonius 10559.

409 **II. (£5.)**—W. M. Killick, Hankelow Court, Hankelow, Nantwich, for chestnut filly, born April 20; *s.* Haydon's King Rufus 12860, *d.* 24862 Shavington Princess Parade *by* Antonius 10559.

408 **III. (£3.)**—Theo. Hignett, St. Ives, Sandfield Park, West Derby, Liverpool, for chestnut filly, born May 8; *s.* Bertrano 13288, *d.* 25024 Angram Express *by* Angram Majesty 11967.

411 **R. N.**—Mrs. E. M. Slough, Oakdene, Byng Road, High Barnet.

Hackney Ponies.

Class 64.—*Hackney Pony Stallions, born in or before* 1921, *not exceeding* 14 *hands.*

412 **I. (£15.)**—John Jones & Son, Dinarth Hall Pony Stud, Colwyn Bay, for **Inkberrow Swell** 13808, brown, born in 1920, bred by J. H. Hickin, Three House Farm, Inkberrow; *s.* Torchfire 9472, *d.* 20479 Alms Hill Lady *by* Talke Fire King 9932.

Class 65.—*Hackney Pony Stallions, born in* 1922 (*not exceeding* 13·3 *hands*) *or* 1923 (*not exceeding* 13·2 *hands*).

415 **I. (£15, & Champion.[3])**—Harold S. Kenyon, Links Farm, St. Annes-on-Sea, for **Talke Bonfire** 14178, bay, born in 1922, bred by W. Wainwright, Talke, Stoke-on-Trent; *s.* Southworth Swell 11219, *d.* 24086 Talke Fire Fly *by* Talke Fire King 9932.

417 **II. (£10, & R. N. for Champion.[3])**—Arthur J. Willett, Stockton House, Warrington, for **Swellboy** 14398, dark bay, born in 1922; *s.* Southworth Swell 11219, *d.* 23967 Harviestoun Flavia *by* Sir Horace 5402.

416 **III. (£5.)**—William Wainwright, Pony Stud, Talke, Stoke-on-Trent, for **Talke Brigadier** 14300, bay, born in 1923; *s.* Bricket Fusilier 13509, *d.* 20273 Talke Fire Queen *by* Fireboy 7440.

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[1] Champion Prize of £10 given by the Hackney Horse Society for the best Stallion in Classes 60 and 61.

[2] Special Prize of £10 given by the Hackney Horse Society for the best Mare in Class 62.

[3] Champion Prize of £10 given by the Hackney Horse Society for the best Stallion in Classes 64 and 65.

Class 66.—*Hackney Pony Mares, with foals at foot, not exceeding* 14 *hands.*

421 **I. (£15, & Champion.[1])**—Mrs. Sofer Whitburn, Amport St. Mary, Andover, for 23909 **Colne Marvel**, bay, born in 1913 [foal *by* Braishfield Fuse 13567], bred by J. B. Wright, Colne, St. Ives; *s.* Gentleman John 3624, *d.* 17031 Warwick Wren *by* Fire Boy 7440.

420 **II. (£10, & R. N. for Champion.[1])**—Mrs. A. C. King, Braishfield Manor, Romsey, Hants, for 22849 **Tin Foil**, bay, born in 1911 [foal *by* Braishfield History 14206]; *s.* Tissington Gideon 9042, *d.* 13513 Gold Foil *by* Sir Horace 5402.

418 **III. (£5.)**—Joseph Bowring, 4, Market Street, Chester, for 25841 **Barmore Lavender**, bay, born in 1919 [foal *by* Braishfield Fuse 13576], bred by H. Latham, Buxton; *s.* Barmore Shot 13153, *d.* 23372 Tissington Aigrette *by* Tissington Revel 10463

419 **R. N.**—John Jones & Son, Dinarth Hall Pony Stud, Colwyn Bay, for **Alms Hill Lady.**

Welsh Cobs.

Class 67.—*Welsh Cob Stallions, born in or before* 1922, *over* 13·2 *hands.*

424 **I. (£15.)**—H. Meyrick Jones, Mathrafal, Meifod, Mont., for **Mathrafal Eiddwen 965**, bay, born in 1914, bred by E. Lloyd, Llanerfyl; *s.* King Flyer 35, *d.* 4295 Polly of Maesgelynog.

422 **II. (£10.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for **Llwyn Viking** 1295, bay, born in 1922; *s.* Llwyn Coming King 1019, *d.* 5663 Llwyn Myfanwy *by* King Flyer 35.

423 **III. (£5.)**—H. Meyrick Jones, for **Mathrafal Blaenor**, chestnut, born in 1920, bred by J. Vaughan, Sychtyn; *s.* Teify Comet 886, *d.* 6511 Sychtyn Cymraes *by* Idloes Flyer 537.

Class 68.—*Welsh Cob Mares, born in or before* 1922, *with foals at foot, over* 13·2 *hands.*

426 **I. (£15.)**—Ness Pony Stud, Neston, Birkenhead, for 7203 **Lady Model**, bay, born in 1917 [foal *by* Llwynog Flyer], bred by Thos. Davies & Co., Lampeter; *s.* Welsh Model 620, *d.* Lady Gwenog 3rd *by* D'lham Confidence.

Welsh Ponies.

Class 69.—*Welsh Pony Stallions, born in or before* 1922, *over* 12 *and not exceeding* 13·2 *hands.*

428 **I. (£15.)**—John Jones & Son, Dinarth Hall Pony Stud, Colwyn Bay, for **Cream Bun** 1288, dun, born in 1920, bred by Lewis Lewis, Tynygraig, Talybont; *s.* Llanio Trotting Comet 872, *d.* 5806 Aeronwen Ceulan *by* Satisfaction.

427 **II. (£10.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for **Llwyn Majesty**, chestnut, born in 1922; *s.* Llwyn Mighty Atom 1041, *d.* 2902 Lady Lightfoot *by* Gwyndy Cymro 154.

Class 70.—*Welsh Pony Mares, born in or before* 1922, *with foals at foot, over* 12 *and not exceeding* 13·2 *hands.*

429 **I. (£15.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for 6086 **Llwyn Tempter**, bay, born in 1915 [foal *by* Llwyn Redstart]; *s.* Temptation 527, *d.* 2902 Lady Lightfoot *by* Gwyndy Cymro 154.

431 **II. (£10.)**—Fredrick Ffitch Mason, The Faraam, Killay, Glam., for 7680 **Wern Sparklet**, grey, born in 1915 [foal *by* Hardwick Don 1064], bred by Lord Swansea, Cae Beris, Builth; *s.* Fairwood Sparklight 471, *d.* 3221 Fairwood Titwhillo.

430 **III. (£5.)**—John Jones & Son, Dinarth Hall Pony Stud, Colwyn Bay, for **Trillo Snorter**, bay, born in 1919 [foal *by* Inkberrow Swell 13808]; *s.* Little Fire 365, *d.* Evia Jones.

Welsh Mountain Ponies.

Class 71.—*Welsh Mountain Pony Stallions, born in or before* 1922, *not exceeding* 12 *hands.*

433 **I. (£15.)**—Mrs. H. D. Greene Grove, Craven Arms, Salop, for **Grove King Cole 2nd** 565, grey, born in 1911; *s.* Grove King Cole 197, *d.* 943 Bleddfa Tell Tale *by* Tyrant 477.

432 **II. (£10.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for **Llwyn Mighty Atom** 1041, chestnut, born in 1918; *s.* Llwyn Little Wonder 905, *d.* 5205 Llwyn Coralie *by* Llwyn Cymro 407.

435 **III. (£5.)**—Fredrick Ffitch Mason, The Faraam, Killay, Glamorgan, for **Grove Grey Dawn** 893, grey, born in 1914, bred by Mrs. H. D. Greene, Grove, Craven Arms; *s.* Dyoll Starlight 4, *d.* 2879 Grove Greyling.

434 **R. N.**—Miss Eurgain Lort, Castlemai Stud Farm, Carnarvon, for **Castlemai Bellum.**

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[1] Special Prize of £10 given by the Hackney Horse Society for the best Mare in Class 66.

[2] Silver Medals were given by the Welsh Pony and Cob Society to the First Prize Winners in each class.

Class 72.—*Welsh Mountain Pony Stallions, born in* 1923 *or* 1924, *not exceeding* 11·3 *hands.*[1]

437 I. (£15.)—Mrs. H. D. Greene, Grove, Craven Arms, Salop, for **Grove Will-o'-the-Wisp,** grey, born in 1923; *s.* Shooting Star 73, *d.* 3017 Grove Twilight *by* Grove Ballistite 200.
436 II. (£10.)—Major W. Marshall Dugdale, D.S O., Llwyn, Llanfyllin, Mont., for **Llwyn Satan,** dark grey blaze, born in 1923; *s.* Kilhendre Celtic Silverlight 953, *d.* 6086 Llwyn Tempter *by* Temptation 527.

Class 73.—*Welsh Mountain Pony Mares, born in or before* 1922, *with foals at foot, not exceeding* 12 *hands.*

445 I. (£15.)—Ness Pony Stud, Neston, Birkenhead, for 5478 **Ness Twilight,** grey, born in 1915 [foal *by* Starshot 1111], bred by T. B. Lewis, Llanwrtyd Wells; *s.* Dyoll Starlight 4, *d.* 4525 Seren Eppynt.
440 II. (£10.)—Mrs. H. D. Greene, Grove, Craven Arms, Salop, for 5469 **Grove Fairy Queen,** chestnut, born in 1915 [foal *by* Shooting Star 73]; *s.* Shooting Star 73, *d.* 2531 Grove Fairy.
443 III. (£5.)—Ness Pony Stud, for 6598 **Ness Daisy,** dun, born in 1915 [foal *by* Forest Star Mixture], bred by Evan Jones, Llandilo; *s.* Wentworth Windfall 993, *d.* 2904 Little Doris *by* Dyoll Starlight 4.
444 R. N.—Ness Pony Stud, for **Ness Iris.**
H. C.—442. C.—439.

Class 74.—*Welsh Mountain Pony Fillies, born in* 1923 *or* 1924, *not exceeding* 11·3 *hands.*[2]

446 I. (£15.)—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for **Llwyn Venus,** grey, born in 1923; *s.* Kilhendre Celtic Silverlight 953, *d.* 5544 Llwyn Marigold.
454 II. (£10.)—Ness Pony Stud, Neston, Birkenhead, for **Ness Bramble,** dark grey, born in 1923, bred by A. Wilson, Cardiff; *s.* Shooting Star 73, *d.* 2866 Stella *by* Ballistite.
447 III. (£5.)—Mrs. H. D. Greene, Grove, Craven Arms, Salop, for 7913 **Grove Spitfire,** bay, born in 1923; *s.* Grove Sprightly 1036, *d.* 2618 Grove Gossip *by* His Lordship 125.
452 IV. (£4.)—John Jones & Son, Dinarth Hall Pony Stud, Colwyn Bay, for **Dinarth Fairy,** red roan, born in 1924; *s.* Dinarth Taffy, *d.* 4129 Llwyn Gem *by* Llwyn Tyrant 207.
450 R. N.—Lord Howard de Walden, Chirk Castle, North Wales, for **Lady Eiddwen.**
H. C.—448, 453. C.—455, 456.

Shetland Ponies.

Class 75.—*Shetland Pony Stallions, born in or before* 1922, *not exceeding* 10·2 *hands.*

459 I. (£15, & Champion.[3])—Mrs. Etta Duffus, Penniwells, Elstree, Herts, for **Dibblitz of Penniwells** 1087, black, born in 1920; *s.* Blitz 848, *d.* Diddy 2193 *by* Diamond 257.
461 II. (£10, & R. N. for Champion.[3])—R. W. R. Mackenzie, Earlshall, Leuchars, Fife, for **Emillina of Earlshall** (Vol. 30, p. 52), chestnut, born in 1922; *s.* Sammy of Liberton 947, *d.* Emily 2nd 1940 *by* Handfû 224.
463 III. (£5.)—Miss Phyllis L. Straker, Stagshaw, Corbridge, Northumberland, for **Dice-Box of Earlshall** 1048, grey, born in 1920, bred by R. W. R. Mackenzie, Earlshall, Leuchars; *s.* Empire Day 539, *d.* Diana 2026 *by* Dick 238.
460 R. N.—Lady Muriel Liddell-Grainger, Ayton Castle, Berwickshire, for **Bright Boy of Earlshall,**

Class 76.—*Shetland Pony Mares, with foals at foot, not exceeding* 10·2 *hands.*

466 I. (£15.)—Mrs. Etta Duffus, Penniwells, Elstree, Herts, for **Mayfair of Penniwells** 4052, black, born in 1918 [foal *by* Huzzoor of Penniwells 864]; *s.* Vagary of Penniwells 841, *d.* Mayfly of Penniwells 2582 *by* Glencairn 314.
468 II. (£10.)—R. W. R. Mackenzie, Earlshall, Leuchars, Fife, for **Emery of Earlshall** 3927, grey, born in 1914 (foal *by* Bell Metal of Earlshall 638]; *s.* Bridegroom of Earlshall 400, *d.* Emily 2nd 1940 *by* Handfû 224.
469 III. (£5.)—R. W. R. Mackenzie, for **Ruby of Earlshall** 3733, black, born in 1914 [foal *by* Nemed of Balmuir 1010]; *s.* Helmet of Earlshall 408, *d.* Rhoda of Earlshall 2738 *by* Thor 83.
465 R. N.—Mrs. F. Brian Bibby, Sansaw, Shrewsbury, for **Sweet Line of Earlshall.**

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[1] Prizes given through the Welsh Pony and Cob Society.
[2] Prizes, except Fourth, given through the Welsh Pony and Cob Society.
[3] Champion Silver Medal given by the Shetland Pony Stud Book Society for the best Shetland Pony in Classes 75 and 76.

Riding Classes.[1]

Class 77.—*Hunter Mares or Geldings, born in* 1921.

491 **I.** (**£15.**)—Geoff Kenyon, Armscote House, Stratford-on-Avon, for **Sinbad the Sailor,** chestnut gelding.

483 **II.** (**£10.**)—Capt. C. Scott Hopkins, Low Hall, Kirbymoorside, for **Ptarmigan,** bay gelding, bred by Major Clive Behrens, Swinton Grange, Malton; *s.* Primary, *d.* 4106 Heather 3rd *by* Scotch Sign.

495 **III.** (**£5.**)—Mrs. J. C. G. Kirkpatrick, Three Gates, Moreton Morrell, Warwick, for **6375 Fair Hilda 2nd,** chestnut mare, bred by John Bamber, Farm Lodge, Ballymena; *s.* Thory, *d.* Fair Hilda.

488 **IV.** (**£3.**)—McMorran Brothers, Aston Cottage, Aston, Nantwich, for **Daybreak,** chestnut gelding; *s.* Strong Drink.

476 **R. N.**—Major Gordon B. Foster, Nawton Towers, Nawton, Yorks, for **Donthwaite.**

H. C.—479. **C.**—489.

Class 78.—*Hunter Mares or Geldings* (*Novice*), *born in or before* 1921, *up to from* 12 *to* 14 *stones.*

504 **I.** (**£15.**)—John Drage, Chapel Brampton, Northampton, for **Brandy,** chestnut gelding born in 1919.

505 **II.** (**£10.**)—John Drage, for **David,** chestnut gelding, born in 1920.

495 **III.** (**£5.**)—Mrs. Kirkpatrick, for **Fair Hilda 2nd.** (See Class 77.)

488 **IV.** (**£3.**)—McMorran Brothers, for **Daybreak.** (See Class 77.)

517 **R. N.**—R. Weaver, Castletown, Farndon, Cheshire, for **Momento.**

H. C.—476. 492.

Class 79.—*Hunter Mares or Geldings* (*Novice*), *born in or before* 1921, *up to more than* 14 *stones.*

529 **I.** (**£15.**)—J. Kenneth Stevenson, The Chase, Upper Welland, Malvern Wells, for **Ambition,** bay gelding, born in 1919.

493 **II.** (**£10.**)—Geoff Kenyon, Armscote House, Stratford-on-Avon, for **Danielli,** grey gelding, born in 1920.

521 **III.** (**£5.**)—Sir Arthur Cory-Wright, Ayot Place, Welwyn, Herts, for **Cinnamon,** dark chestnut gelding, born in 1918.

519 **IV.** (**£3.**)—R. Weaver, Castletown, Farndon, Cheshire, for **Mayfly,** bay gelding, born in 1919.

480 **R. N.**—Mrs. Robert Cottrill, Sandal Lodge, Droitwich, for **Calthorpe.**

Class 80.—*Hunter Mares or Geldings, born in or before* 1921, *up to not more than* 14 *stones. To be ridden by a lady, side-saddle.*

505 **I.** (**£15.**)—John Drage, for **David.** (See Class 78.)

490 **II.** (**£10.**)—McMorran Brothers, Aston Cottage, Aston, Nantwich, for **The Coulin,** bay gelding, born in 1917, bred by P. Molone, V.S., Wexford; *s.* Killinich, *d.* Leap Year.

504 **III.** (**£5.**)—John Drage, for **Brandy.** (See Class 78).

517 **IV.** (**£3.**)—R. Weaver, Castletown, Farndon, Cheshire, for **Momento,** chestnut gelding, born in 1919.

513 **R. N.**—Mrs. Solly Flood, Tattenhall, Chester, for **Peggy.**

Class 81.—*Hunter Mares or Geldings, born in or before* 1921, *up to from* 12 *to* 13·7 *stones.*

477 **I.** (**£20, & R. N. for Champion.**[2])—Mrs. Gordon B. Foster, Nawton Towers, Nawton, Yorks, for **Jovial King,** brown gelding, born in 1918, bred by Duncombe Park Trustees, Helmsley, Yorks; *s.* Jovial, *d.* 6151 Flemish Queen (Supp. No. 763) *by* Pericles.

505 **II.** (**£15.**)—John Drage, for **David.** (See Class 78).

490 **III.** (**£10.**)—McMorran Brothers, for **The Coulin.** (See Class 80.)

533 **IV.** (**£5.**)—W. E. Stokes, Great Bowden, Market Harborough, for **Linthouse,** bay gelding, born in 1914.

495 **V.** (**£3.**)—Mrs. Kirkpatrick, for **Fair Hilda 2nd.** (See Class 77.)

492 **R. N.**—Geoff Kenyon, Armscote House, Stratford-on-Avon, for **Whitebait.**

Class 82.—*Hunter Mares or Geldings, born in or before* 1921, *up to more than* 13·7 *and not more than* 15 *stones.*

511 **I.** (**£20, & Champion.**[2])—W. H. Midwood, Calveley Hall, Tarporley, for **Wilknestown,** chestnut gelding.

504 **II.** (**£15.**)—John Drage, for **Brandy.** (See Class 78.)

493 **III.** (**£10.**)—Geoff Kenyon, for **Danielli.** (See Class 79.)

519 **IV.** (**£5.**)—R. Weaver, for **Mayfly.** (See Class 79.)

476 **V.** (**£3.**)—Major Gordon B. Foster, Nawton Towers, Nawton, Yorks, for **Donthwaite,** bay gelding; *s.* Dunholme, *d.* Roscommon Belle *by* Broxton.

534 **R. N.**—William J. Neilson, Berrow House, Ledbury, for **The Brook.**

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[1] Prizes given by the Chester Local Committee.

[2] Gold Challenge Cup value Fifty Guineas, given by gentlemen interested in Hunters for the best Mare or Gelding in Classes 77 to 83.

Class 83.—*Hunter Mares or Geldings, born on or before* 1921, *up to more than* 15 *stones.*

529 **I. (£20.)**—J. Kenneth Stevenson, for **Ambition.** (See Class 79)

543 **II. (£15.)**—Major J. L. Nickisson, Hinton Manor, Swindon, for **Buckingham** (Supp. No. 804), flea-bitten grey gelding, aged.

521 **III. (£10.)**—Sir Arthur Cory-Wright, for **Cinnamon.** (See Class 79.)

507 **IV. (£5.)**—John Drage, Chapel Brampton, Northampton, for **Tank,** bay gelding, born in 1918.

Hacks and Riding Ponies.

Class 84.—*Hack or Riding Pony Mares or Geldings, not exceeding* 15 *hands (Light Weight).*

555 **I. (£15, & Champion.[1])**—Mrs. Evelyn Rich, The Grange Stud Farm, Westerham Hill, Kent, for **Loch Monar,** chestnut mare, born in 1921, bred by the Gravelstown Stud, Ireland; *s.* Stornoway, *d.* Monnie *by* Bachelor's Double,

548 **II. (£10.)**—Indian Army Remount Department, c/o Capt. C. F. Aitken, Glendower Hotel, South Kensington, for **Trocadero,** brown gelding, born in 1920; *s.* Pescadero.

487 **III. (£5.)**—McMorran Brothers, Aston Cottage, Aston, Nantwich, for **Parade,** chestnut gelding; *s.* Ybro, *d.* Marigold *by* Marco.

545 **IV. (£3.)**—Lord Howard de Walden, Chirk Castle, North Wales, for **Pat,** grey gelding, born in 1918.

Class 85.—*Hack or Riding Pony Mares or Geldings, not exceeding* 15 *hands (Heavy Weight).*

494 **I. (£15.)**—Geoff Kenyon, Armscote House, Stratford-on-Avon, for **Chubby,** grey gelding.

Class 86.—*Hack or Riding Pony Mares or Geldings, over* 15 *hands.*

561 **I. (£15, & R. N. for Champion.[1])**—Lady Penrhyn, Wicken Park, Stony Stratford, for **Bimbim,** chestnut mare, born in 1920.

524 **II. (£10.)**—Sir Howard Frank, Bart., K.C.B., G.B.E., 20, Hanover Square, London, W., for **Derwent Lass,** chestnut mare, aged.

556 **III. (£5.)**—Mrs. Evelyn Rich. The Grange Stud Farm, Westerham Hill, Kent, for **Sovereign 651,** chestnut gelding, born in 1917; *s.* Dundreary, *d.* Bank Note *by* Avarice.

553 **IV. (£3.)**—Miss M. M. Parkes, Lapel House, Quinton, Birmingham, for **Thorpe Lad,** chestnut gelding, born in 1920, bred by J. Rohan; *s.* Ben Alder, *d.* M. T. *by* Toussaint.

478 **R. N.**—Mrs. Gordon B. Foster, Nawton Towers, Nawton, Yorks, for **Salton.**

Children's Ponies.

Class 87.—*Mares or Geldings, not exceeding* 13 *hands, to be ridden by a child born in or after* 1915.

566 **I. (£10.)**—Joan Bickley, Grafton House, Montford Bridge, Salop, for **Dainty,** bay mare, born in 1918.

535 **II. (£5.)**—William J. Neilson, Berrow House, Ledbury, for **Pixie,** grey mare, born in 1919.

531 **III. (£3.)**—J. Kenneth Stevenson, The Chase, Upper Welland, Malvern Wells, for **Tom Tits,** bay gelding, born in 1920.

569 **R. N.**—Miss Dorothy Patterson, The Riding School, Trentham, Stoke-on-Trent, for **Bustle.**

H. C.—568, 570, 572.

Class 88.—*Mares or Geldings, over* 13 *and not exceeding* 14 *hands, to be ridden by a child born in or after* 1912.

547 **I. (£10.)**—Mrs. Philip Hunloke, Cowbridge, Malmesbury, for **Cinders,** black brown mare, born in 1919.

579 **II. (£5.)**—Eric B. Forwood, Stanford Mear, Rugby, for **Muscatel,** bay mare, born in 1919.

575 **III. (£3.)**—Charles E. Edwards, Mount Seifton, Craven Arms, Salop, for **Champagne.**

587 **R. N.**—Miss Bunty Tulloch, The Ridge, Alderley Edge, for **Moonbeam.**

H. C.—573, 577, 578, 584.

Class 89.—*Mares or Geldings, over* 14 *and not exceeding* 15 *hands, to be ridden by a child born in or after* 1909.

594 **I. (£10.)**—Miss Betty Whittaker, Rivenholl, Church Stretton, Salop, for **Mirage,** bay mare, born in 1920.

487 **II. (£5.)**—McMorran Brothers, for **Parade.** (See Class 84.)

589 **III. (£3.)**—Charles E. Edwards, Mount Seifton, Craven Arms, for **Twilight,** chestnut gelding.

542 **R. N.**—Lord Hindlip, Doveridge Hall, Derby, for **Lustre.**

H. C.—588, 591.

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[1] Silver Challenge Cup, value Twenty-five Guineas, given by a member of the R.A.S.E. for the best animal in Classes 84 to 86.

Driving Classes.[1]

SINGLE HARNESS.

Class 90.—*Harness Mares or Geldings (Novice), not exceeding* 14 *hands.*

595 **I. (£15, Champion,[2] & R. N. for Champion.[3])**—WILLIAM HEATH, Shavington House, Crewe, for **Oxholme Knight**, black-brown gelding, born in 1918, bred by H. Gilding, Gateacre, Liverpool; *s.* Mathias 6173, *d.* 18691 Tissington Golden Ray *by* Goldfinder 6th 1791.

614 **II. (£10.)**—ROBERT HORNER, 39, Waterloo Road, Middlesbrough, for 25948 **Dainty Dinah**, bay mare, born in 1921; *s.* Fusee 12626, *d.* 25321 Sweet Liberty *by* Successful 8314.

612 **III. (£5.)**—MRS. EDGAR HENRIQUES, Fernholm, Southport, for 25750 **Buckley Prima Donna**, bay mare, born in 1920, bred by the late C. F. Kenyon, Whitchurch, Salop; *s.* Melbourne Shot 13055, *d.* 18691 Tissington Golden Ray *by* Goldfinder 6th 1791.

596 **IV. (£3)**—HAROLD S. KENYON, Links Farm, St. Annes-on-Sea, for 25964 **Julia Southworth**, bay mare, born in 1921, bred by Joshua Ball, Southworth Hall, Warrington; *s.* Southworth Swell 11219, *d.* 21674 Southworth Merriment *by* Southworth Tissington 9898.

615 **R. N.**—MISS EURGAIN LORT, Castlemai Stud Farm, Carnarvon, for **Castlemai Devilled Biscuit.**

Class 91.—*Harness Mares or Geldings (Novice), over* 14 *and not exceeding* 15 *hands.*

634 **I. (£15.)**—THEO HIGNETT, St. Ives, Sandfield Park, West Derby, Liverpool, for **West Derby Model** G 415, dark bay gelding, born in 1919, bred by T. J. Jones, High Street, Llangefni, Anglesey; *s.* Marton Fireway 8567, *d.* Rosa Wildfire *by* Londesborough Squire 8550.

641 **II. (£10.)**—J. R. SKELLERN, 5 Stanley Street, Wrexham, for 25984 **Trillo Princess**, dark brown mare, born in 1920, bred by John Jones and Son, Dinarth Hall, Colwyn Bay; *s.* Danum Orchid 13497, *d.* 16733 Lady Confina, *by* Confidant 936.

Class 92.—*Harness Mares or Geldings (Novice), over* 15 *hands.*

647 **I. (£15, & R. N. for Champion.[2])**—PHILIP SMITH, Haddon House, Ashton-on-Mersey, for 25897 **Haddon Philipina**, chestnut mare, born in 1921; *s.* Haydon's King Rufus 12860, *d.* 23586 Glenavon Flame *by* King's Proctor 11112.

649 **II. (£10.)**—F. A. WARING, Homesefton, Sefton Park, Liverpool, for **Sefton Courtier** G 347, bay gelding, born in 1921, bred by Enoch Glen, Kaim Park, Bathgate; *s.* Ophelius 13344, *d.* 24043 Oakington Ring-o'-Bell *by* Antonius 10559.

648 **III. (£5.)**—EDWIN TIPPER, Cross Plains Farm, Needwood, Burton-on-Trent, for **Park Royal**, chestnut gelding, born in 1920; *s.* Scout Master 12487, *d.* 22861 Vivette *by* Thirkburn Toreador 8534.

642 **IV. (£3.)**—JOHN R. SKELLERN, 5 Stanley Street, Wrexham, for **Sir William**, bay gelding, born in 1921, bred by G. Cooke, Shipton, Thorpe, East Yorks; *s.* Field Polonius 13195, *d.* 24830 Primrose Maggie *by* Buckthorpe Polonius 11998.

Class 93.—*Harness Mares or Geldings, not exceeding* 13·2 *hands.*

606 **I. (£15, & Champion.)[4]**—WILLIAM S. MILLER, Balmanno Castle, Bridge of Earn, for **Billet Doux** G 382, brown gelding, born in 1921, bred by C. H. Wing, Boston; *s.* Southworth Swell 11219, *d.* 23186 Jenny Melbourne *by* Successful 8314.

601 **II. (£10, & R. N. for Champion.[4])**—RICHARD BELCHER, High Street, West Bromwich, for **Glenavon Gunfire** G 337, bay gelding, born in 1920, bred by Enoch Glen, Kaim Park, Bathgate; *s.* Melbourne Shot 13055, *d.* 23129 Glenavon Princess Caprice *by* Fireboy 7440.

619 **III. (£5.)**—ANDREW MAITLAND, Thornleigh, Vicars Cross, Chester, for **Cestrian Mercury** G 433, bay gelding, born in 1921, bred by Mrs. Humphrey, Morton, Gainsborough; *s.* Successful 8314, *d.* 23855 Axholme Lady Edith *by* Southworth Swell 11219.

652 **IV. (£3.)**—SAM HOLDSWORTH, 9 Stanmore Place, Lidget Green, Bradford, for 25511 **Buckley Sunrise**, bay mare, born in 1919, bred by the late C. F. Kenyon, Whitchurch, Salop; *s.* Successful 8314, *d.* 18691 Tissington Golden Ray *by* Goldfinder 6th 1791.

615 **R. N.**—MISS EURGAIN LORT, Castlemai, Carnarvon, for **Castlemai Devilled Biscuit.**
H. C.—627.

Class 94.—*Harness Mares or Geldings, over* 13·2 *and not exceeding* 14 *hands.*

602 **I. (£15.)**—RICHARD BELCHER, High Street, West Bromwich, for **Buckley Searchlight** G 100, brown gelding, born in 1914, bred by W. O. Smethurst, Woolfold, Bury, Lancs; *s.* Torchfire 9472, *d.* 24608 Walshaw Sunlight *by* Ganymede 2076.

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[1] Prizes given by the Chester Local Committee.

[2] Gold Challenge Cup, value Fifty Guineas, given by a Member of the Hackney Horse Society for the best Animal in the Novice Classes 90 to 92.

[3] Champion Prize of £5 given by the Hackney Horse Society for the best Mare or Gelding in Classes 90 to 97, the produce of a registered Hackney Stallion.

[4] Silver Challenge Cup, value Twenty-five Guineas, given by the National Terrier Club for the best Pony not exceeding 14 hands in Classes 93 and 94.

620 **II.** (£10.)—Andrew Maitland, Thornleigh, Vicars Cross, Chester, for **Cestrian Furious** G 265, dark brown gelding, born in 1917, bred by G. T. Shield, Burnopfield, Durham; *s.* Sir Ivor 12737, *d. by* Torchfire 9472.

595 **III.** (£5.)—William Heath, for **Oxholme Knight.** (See Class 90.)

614 **IV.** (£3.)—Robert Horner, for **Dainty Dinah.** (See Class 90.)

612 **R. N.**—Mrs. Edgar Henriques, Fernholm, Southport, for **Buckley Prima Donna.**

Class 95.—*Harness Mares and Geldings, over* 14 *and not exceeding* 15 *hands.*

608 **I.** (£15.)—William S. Miller, Balmanno Castle, Bridge of Earn, for **25386 Stella Vane,** brown mare, born in 1919, bred by James Billingham, The Limes, Old Hill; *s.* Mathias 6473, *d.* 18500 Polly Vane *by* Polonius 4931.

630 **II.** (£10.)—H. J. Colebrook, Fulmer, Bucks, for **Netherfield Argenteau** G 66, bay gelding, born in 1916, bred by Mrs. A. C. King, Braishfield Manor, Romsey; *s.* Mathias 6473, *d.* 22414 Braishfield Chiffon *by* Berry Hill Snap 8739.

641 **III.** (£5.)—J. R. Skellern, for **Trillo Princess.** (See Class 91.)

634 **IV.** (£3.)—Theo Hignett, for **West Derby Model.** (See Class 91.)

Class 96.—*Harness Mares or Geldings, over* 15 *and not exceeding* 15·2 *hands.*

622 **I.** (£15, & R. N. for Champion.[1])—Andrew Maitland, Thornleigh, Vicars Cross, Chester, for **24544 Leicester Princess,** dark chestnut mare, born in 1916, bred by J. O. Nicol, London Road, Leicester; *s.* Mathias 6473, *d.* 21744 Westfield Surprise *by* Paddock Polonius 7208.

631 **II.** (£10.)—H. J. Colebrook, Fulmer, Bucks, for **Fulmer Pilot** G 169, chestnut gelding, born in 1916, bred by Caleb Humphreys, Higher Tranmere, Birkenhead; *s.* Mathias 6473, *d.* 19815 Calabar Canadian Girl *by* Garton Duke of Connaught 3009.

647 **III.** (£5.)—Philip Smith, for **Haddon Philipina.** (See Class 92.)

648 **IV.** (£3.)—Edwin Tipper, for **Park Royal.** (See Class 92.)

Class 97.—*Harness Mares or Geldings, over* 15·2 *hands.*

610 **I.** (£15, Champion,[2] & Champion.[1])—William S. Miller, Balmanno Castle, Bridge of Earn, for **Grand Fashion** G 325, bay gelding, born in 1918, bred by Ernest Bewley, Danum, Rathgar; *s.* Mathias 6473, *d.* 20279 Terrington Hebe *by* Goldfinder 6th 1791.

655 **II.** (£10.)—Mrs. Alice Chavasse, 56 High Street, Sutton Coldfield, for **Tudor Emperor** G 387, chestnut gelding, born in 1916, bred by Dr. Howard S. Chavasse, High Street, Sutton Coldfield; *s.* Adbolton Kingmaker 12274, *d.* 23380 Tudor Empress *by* Mathias 6473.

651 **III.** (£5.)—F. A. Waring, Homesefton, Sefton Park, Liverpool, for **Sefton Cavalier** G 279, bay gelding, born in 1920, bred by the late Joseph Morton, Stow, Downham Market; *s.* St. Adrian 13090, *d.* 24150 Alleyne *by* Beckingham Squire 8070.

632 **IV.** (£3.)—H. J. Colebrook, Fulmer, Bucks, for **Fulmer Maxim.**

DOUBLE HARNESS.

Class 98.—*Harness Mares or Geldings, not exceeding* 15 *hands.*

656 **I.** (£20, & Champion.[3])—Nigel C. Colman, 1 Upper Grosvenor Street, London, W., for **25770 Silhouette of Nork,** brown mare, born in 1918; *s.* Mathias A1 10751, *d.* 17233 Cristolia *by* Polonius 4931; and **Lochardil** G 217, brown gelding, born in 1919, bred by Mrs. J. E. Logan, Doon Bank, Inverness; *s.* Lord Lucy 13623, *d.* 22571 Granny *by* Mathias 6473.

630 & 633 **II.** (£15.)—H. J. Colebrook, for **Netherfield Argenteau** (see Class 95); and **Glenavon Crest** G 290, brown bay gelding, born in 1919, bred by McCall Brothers, Burnhead, Kilsyth; *s.* Mathias 6473, *d.* 22434 Burnhead Countess Campion *by* Adderley 10054.

620 & 624 **III.** (£10.)—Andrew Maitland, for **Cestrian Furious** (see Class 94); and **Cestrian Fury,** dark brown.

Class 99.—*Harness Mares or Geldings, over* 15 *hands.*

631 & 632 **I.** (£20, & R. N. for Champion.[3]—H. J. Colebrook, for **Fulmer Pilot** (see Class 96); and **Fulmer Maxim.**

625 **II.** (£15.)—Andrew Maitland, Thornleigh, Vicars Cross, Chester, for **Cestrian Regal** and **Cestrian Royalist,** bay geldings.

649 & 651 **III.** (£10.)—F. A. Waring, for **Sefton Courtier** (see Class 92); and **Sefton Cavalier** (see Class 97).

TANDEMS.

Class 100.—*Harness Mares or Geldings, not exceeding* 15 *hands.*

656 **I.** (£20, & R. N. for Champion.[4])—Nigel C. Colman, for **Silhouette of Nork** and **Lochardil.** (See Class 98.)

630 & 633 **II.** (£15.)—H. J. Colebrook, for **Netherfield Argenteau** (see Class 95); and **Glenavon Crest** (see Class 98).

626 **III.** (£10.)—Andrew Maitland, Thornleigh, Vicars Cross, Chester.

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[1] The "Chester" Gold Challenge Cup, value Fifty Guineas, given by the Chester Local Committee for the best Animal in Classes 93 to 97.

[2] Champion Prize of £5 given by the Hackney Horse Society for the best Mare or Gelding in Classes 90 to 97, the produce of a registered Hackney Stallion.

[3] The "Glasgow" Gold Challenge Cup, value Fifty Guineas, given by a member of the R.A.S.E., for the best Pair in Classes 98 and 99.

[4] Silver Challenge Cup, value Twenty-five Guineas, given by a member of the R.A.S.E. for the best Tandem in Classes 100 and 101.

Class 101.—*Harness Mares or Geldings, over* 15 *hands.*

625 **I. (£20, & Champion.[1])**—ANDREW MAITLAND, for **Cestrian Regal** and **Cestrian Royalist.** (See Class 99.)

631 & 632 **II. (£15.)**—H. J. COLEBROOK, for **Fulmer Pilot** (see Class 96); and **Fulmer Maxim.**

Four-in-Hand Teams.

Class 102.—*Mares or Geldings.*

646 **I. (£30.)**—W. A. BARRON, 91 Westbourne Terrace, London, W., for four chestnuts.

657 **II. (£25.)**—W. W. THEOBALD, Bournside, Cheltenham, for four chestnuts.

658 **III. (£20.)**—PETER WALKER & SON, LTD., 105 Duke Street, Liverpool, for four bays.

CATTLE.

Shorthorns.

Class 103.—*Shorthorn Bulls, born in or before* 1922.

674 **I. (£15.)**—THE HON. MRS. BRUCE WARD, Godinton, Ashford, Kent, for **Balcairn Eagle** 168680, dark roan, born April 8, 1921, bred by F. L. Wallace, Balcairn, Oldmeldrum; *s.* Earl of Kingston 120041, *d.* Edgcote Doris *by* Ascott Magnett 118612.

667 **II. (£10.)**—W. S. MACWILLIAM, M.V.O., Garbity, Orton Station, Morayshire, for **Saltoun Jehu** 166834, dark roan, born April 1, 1920, bred by Captain A. M. Talbot Fletcher, Saltoun, E. Lothian; *s.* Sanquhar Grand Courtier 139193, *d.* Saltoun Jenny Lind *by* Grand Champion 120527.

659 **III. (£5.)**—H.R.H. THE PRINCE OF WALES, K.G., Marsh Farm, Landulph, Hatt, Cornwall, for **Diamond Butterfly** 155319, roan, born April 18, 1919; *s.* Butterfly Knight 130029, *d.* Miss Butterfly 5th *by* Leap Year 116201.

675 **IV. (£4.)**—THE EXORS. OF THE LATE F. B. WILKINSON, Cavendish Lodge, Edwinstowe, Mansfield, for **Hean Chorister** 156374, white, born May 30, 1919, bred by Lord Merthyr, Hean Castle, Saundersfoot, Pembroke; *s.* Collynie Chancellor 119543, *d.* Charity 14th *by* Newton Crystal 92658.

668 **V. (£3.)**—ALBERT JAMES MARSHALL, Bridgebank, Stranraer, for **Bridgebank Retrospect** 161657, dark roan, born June 20, 1920; *s.* Fairlawne Red Lion 142322, *d.* Bridgebank Rosewood 2nd *by* Prince Charlie 117015.

673 **R. N.**—J. H. TOPPIN, Musgrave Hall, Skelton, Cumberland, for **Brandsby's D.S.O.**
H. C.—660. **C.**—666, 670, 676.

668, 685, 697 **Special, £15.[2]**—ALBERT JAMES MARSHALL, for **Bridgebank Retrospect, Bridgebank Phœnix** and **Bridgebank Bard.**

659, 703, 791 **Special, £10.[2]**—H.R.H. THE PRINCE OF WALES, K.G., for **Diamond Butterfly, Climsland Regal King 2nd** and **Climsland Orange Blossom 3rd.**

Class 104.—*Shorthorn Bulls, born on or between January* 1 *and March* 31, 1923.[3]

686 **I. (£15.)**—MAJOR J. A. MORRISON, D.S.O., Basildon Park, Goring, Reading, for **Basildon Royal 2nd** 187225, white, born Jan. 15; *s.* Collynie Orient 170462, *d.* Basildon Rosewood *by* Scarabe 128047.

685 **II. (£10.)**—ALBERT JAMES MARSHALL, Bridgebank, Stranraer, for **Bridgebank Phœnix** 187759, roan, born Jan. 3; *s.* Balcairn Baronet 153566, *d.* 5590 Princess Glendora *by* Edgcote Hero 136371.

680 **III. (£5.)**—GEORGE HARRISON, Gainford Hall, Darlington, for **Tillmouth Wonder** 194694, roan, born Feb. 9, bred by J. R. Wood, Castle Heaton, Cornhill-on-Tweed; *s.* Edgcote Viscount 142232, *d.* Shipley Witch *by* Alnwick Magician 129120.

681 **IV. (£4.)**—J. and N. N. LEE, Stonelands, Arncliffe, Skipton-in-Craven, for **Millhills Clipper King** 192163, roan, born March 8, bred by D. M. Stewart, Millhills, Crieff; *s.* Cupbearer of Collynie 114960, *d.* Fair Clipper *by* Collynie Cruickshank 105068.

684 **R. N.**—ALBERT JAMES MARSHALL, for **Bridgebank Fairie Knight.**

Class 105.—*Shorthorn Bulls, born on or between April* 1 *and December* 31, 1923.

698 **I. (£15, R. N. for Champion,[4] and R. N. for Champion.[5])**—ALBERT JAMES MARSHALL, Bridgebank, Stranraer, for **Collynie Royal Leader** 188636, red roan, born Dec. 1, bred by J. Duthie Webster, Collynie, Tarves, N.B.; *s.* Balcairn White Eagle 153591, *d.* Eliza Lass *by* Masterstroke 126820.

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[1] Silver Challenge Cup, value Twenty-five Guineas, given by a member of the R.A.S.E. for the best Tandem in Classes 100 and 101.

[2] Special Prizes of £15 First Prize, and £10 Second Prize, given by the Shorthorn Society for the best groups of three animals bred by Exhibitor in Classes 103 to 113.

[3] Prizes, except Fourth, given by the Shorthorn Society.

[4] Champion Prize of £20 given by the Shorthorn Society, for the best Bull in Classes 103 to 108. A Silver Medal is given by the Shorthorn Society to the Breeder of the Champion Bull.

[5] The "Brothers Colling" Memorial Perpetual Challenge Cup, value Three Hundred Guineas, given through the Durham Agricultural Committee for the best Shorthorn in Classes 103 to 113.

699 **II. (£10.)**—Albert James Marshall, for **Obligation** 192507, dark roan, born Nov. 7 bred by J. and L. Durno, Uppermill, Tarves; *s.* Millhills Clarion 174123, *d.* Orange Blossom 50th *by* Collynie Chief 114765.

694 **III. (£5.)**—George Harrison, Gainford Hall, Darlington, for **Abbeyfarm Premier** 186474, roan, born Oct. 21, bred by J. and H. P. Webber, Abbey Farm, Malton; *s.* Cudham Fancy 155160, *d.* Rosedale Mina 9th *by* Allerston Mayor 110736.

697 **IV. (£4.)**—Albert James Marshall, for **Bridgebank Bard** 187700, red, born Aug. 23; *s.* Balcairn Baronet 153566, *d.* Blythesome Beatrice *by* Broadhooks Diamond 124530.

701 **V. (£3.)**—J. M. Strickland, Bainesse, Catterick, for **Bainesse Ramsden King 2nd** 186872, white, born April 6; *s.* Bainesse Royal Prince 168665, *d.* Lothian Miss Ramsden *by* Millhills Rothes King 138020.

688 **R. N.**—Miss A. Sylvia Brocklebank, O.B.E., Wing Grange, Oakham, for **Balcairn Golden Monarch.**

H. C.—687.

Class 106.—*Shorthorn Bulls, born on or between January* 1 *and March* 31, 1924.[1]

721 **I. (£15, Champion,[2] and Champion.[3])**—George Swift, Haselor, Evesham, for **Haselor Clipper Knight** 19935, white, born Jan. 7; *s.* Collynie Clipper King 135816, *d.* 3496 Tongswood Clipper *by* Knight Lavender 121046.

710 **II. (£10.)**—John Heaton, O.B.E., Low Startforth Hall, Barnard Castle, for **Startforth Loyalist** 203897, white, born Feb. 10; *s.* Fairlawne Air Raid 148740, *d.* 25076 Startforth Lavender Crystal *by* Collynie Lavender King 141709.

703 **III. (£5.)**—H.R.H. The Prince of Wales, K.G., Marsh Farm, Landulph, Hatt, Cornwall, for **Climsland Regal King 2nd** 197380, roan, born Feb. 29; *s.* Christian King 147900, *d.* Climsland Regal Mary (Vol. 65, p. 560) *by* Edgcote Count 136364.

716 **IV. (£4.)**—Albert James Marshall, Bridgebank, Stranraer, for **Dunglass Roland** 198222, red, born March 31, bred by W. and J. W. Peterkin, Dunglass, Conon Bridge; *s.* Whiterow Commodore 186213, *d.* 16971 Queen of the Rothes 10th *by* Collynie Star 141717.

707 **V. (£3.)**—Arthur Green, Denton, Ben Rhydding, Leeds, for **Denton Triumph** 197995 red, born Feb. 28; *s.* Collynie Golden Key 170455, *d.* Millhills Rothes Queen 3rd (Vol. 65, p. 1122) *by* Cupbearer of Collynie 114960.

709 **R. N.**—George Harrison, Gainford Hall, Darlington, for **Gainford Advocate.**

C.—711, 717, 718.

713 **Special.[4]**—John Latham, Green Bank Farm, Alsager, Cheshire, for **Prince Edward** 201846, dark roan, born March 5, bred by J. Barnes, Aikbank, Wigton; *s.* King Edward 164538, *d.* Aikbank Ramsden (Vol. 64, p. 703) *by* Pearl-Finder 116911.

Class 107.—*Shorthorn Bulls, born on or between April* 1 *and June* 30, 1924.

735 **I. (£15.)**—Mrs. Frances Pumphrey, Hindley Hall, Stocksfield-on-Tyne, for **Hindley White Ensign** 199551, white, born May 24; *s.* Double Event 162830, *d.* 17205 Hindley Clipper Crystal *by* Edgcote Goldstone 142214.

727 **II. (£10.)**—Colonel H. T. Fenwick, Stenigot, Louth, Lincs, for **Archer Royal** 195692, born April 24; *s.* Millhills Rifleman 183162, *d.* 23733 Augusta Perseverance *by* Vizier 134174.

722 **III. (£5.)**—His Majesty the King, The Royal Farms, Windsor, for **Windsor Monson** 204070, white, born June 2; *s.* Cudham Prince Augustus 170765, *d.* 32516 Windsor Golden Jilt *by* Royal Gauntlet 159047.

728 **IV. (£4.)**—James Douglas Fletcher, Rosehaugh, Avoch, Ross-shire, for **Rosehaugh Golden Hero** 202330, roan, born April 3; *s.* Balnakyle Rothes Prince 178155, *d.* Gem of Suddie (Vol. 62, p. 793) *by* Collynie Matadore 111337.

732 **V. (£3.)**—George Harrison, Gainford Hall, Darlington, for **Leveret** 200427, white, born April 1, bred by G. B. Shields, Dolphinstone, Tranent; *s.* Millhills Buccaneer 183155, *d.* Lavender Lilac (Vol. 64, p. 1264) *by* Collynie Grand Duke 124844.

729 **R. N.**—L. V. Garland, Greenbank, The Towans, Hayle, Cornwall, for **Towan Bachelor.**

C.—724, 734.

Class 108.—*Shorthorn Bulls, born on or between July* 1 *and December* 31, 1924.[1]

758 **I. (£15.)**—Sir George Alfred Wills, Bart., Langford Court Farm, Langford, Bristol, for **Rickford Eclipse** 202189, dark roan, born July 2; *s.* Collynie Rubicon 179695, *d.* 44018 Eliza Lady 4th *by* Balcairn White Eagle 153591.

742 **II. (£10.)**—Alexander & Addie, Newbiggin, Cambus, Stirling, for **Cambus Equerry**, 197027, red and little white, born Nov. 26; *s.* Millhills Eclipse 174124, *d.* 32682 Cambus Secret *by* Balcairn Guardsman 160949.

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[1] Prizes, except Fourth and Fifth, given by the Shorthorn Society.

[2] Champion Prize of £20 given by the Shorthorn Society, for the best Bull in Classes 103 to 108. A Silver Medal is given by the Shorthorn Society to the Breeder of the Champion Bull.

[3] The "Brothers Colling" Memorial Perpetual Challenge Cup, value Three Hundred Guineas, given through the Durham Agricultural Committee for the best Shorthorn in Classes 103 to 113.

[4] Special District Prize of £10, given by the Shorthorn Society, for the best Bull in Classes 106, 107 and 108, the property of an Exhibitor residing in Cheshire. A Silver Medal was given by the Shorthorn Society to the Breeder of the animal winning the £10 District Prize.

744 **III. (£5.)**—Lieut.-Colonel E. P. Brassey, Manor Farm, Upper Slaughter, Bourton-on-the-Water, Glos, for **Rosebud King** 202304, red roan, born July 2; *s.* Abbeymains Combatant 168245, *d.* 10636 Rosebud's Fancy *by* Edgcote Magnet 148667.

741 **IV. (£4.)**—H.R.H. The Prince of Wales, K.G., Home Farm, Stoke Climsland, Cornwall, for **Climsland Royalist** 197382; roan, born July 11; *s.* Collynie Herald 179685, *d.* Whiteford Butterfly (Vol. 64, p. 670) *by* Nicholas of Cluny 116746.

748 **V. (£3.)**—George Harrison, Gainford Hall, Darlington, for **Gainford Pilot** 198856, red roan, born Nov. 2; *s.* Cicero Jilt 179483, *d.* Gainford Pauline 4th (Vol. 64, p. 961) *by* Collynie Mandarin 119552.

753. **R. N.**—Sir Herbert Leon, Bart., Bletchley Park, Bletchley, for **Bletchley Royalist.**

H. C.—739. **C.**—750, 751.

Class 109.—*Shorthorn Cows (in-milk), born in or before* 1921.

761 **I. (£15.)**—Joseph Harris, Brackenburgh Tower, Carlisle, for 13723 **Water Lily 6th**, red, born Dec. 25, 1920, calved Oct. 16, 1924; *s.* Moresby Royalist 157861, *d.* Water Lily 4th *by* Duke of Whitehall 136251.

765 **II. (£10.)**—William Woof, Clawthorpe Hall, Burton, Westmorland, for **Rosebud** (Vol. 65, p. 1216), dark roan, born Dec. 1, 1918, calved Jan. 2, 1925; *s.* Smiling Yet 133640, *d.* Red Rosebud *by* Rosebery 117391.

763 **III. (£5.)**—J. M. Strickland, Bainesse, Catterick, for 30579 **Bainesse Butterfly**, dark roan, born March 1, 1921, calved Nov. 10, 1924; *s.* Cudham Max 155167, *d.* Brandsby's Butterfly 6th *by* Staff Officer 133741.

764 **R. N.**—Hon. Mrs. Bruce Ward, Godinton, Ashford, Kent, for **Godinton Jilt.**

H. C.—759.

Class 110.—*Shorthorn Heifers (in-milk), born in* 1922.

767 **I. (£15, & Champion.[1])**—Sir Cecil Chubb, Bart., Bapton Manor, Codford, Wilts, for 44438 **Princess Margaret**, roan, born Jan. 5, calved Oct. 19, 1924, bred by J. Deane Willis, Stratton Park, Stratton St. Margarets; *s.* Billington Snowstorm 154027, *d.* Princess Mary *by* Musical Mac 112632.

771 **II. (£10.)**—Lord Sherborne, Sherborne Park, Northleach, for 42352 **Golden Lassie**, roan, born June 19, calved Jan. 4, 1925; *s.* Hindley Snowstorm 142969, *d.* 3609 Notlaw Pure Gold 23rd *by* Notlaw Luck 138276.

768 **III. (£5.)**—James Douglas Fletcher, Rosehaugh, Avoch, Ross-shire, for 36350 **Rosehaugh Clipper 5th**, dark roan, born May 5, calved Jan. 28, 1925; *s.* Millhills Macebearer 157773, *d.* Rosehaugh Clipper *by* Lieutenant Cruickshank 116230.

772 **R. N.**—J. H. Toppin, Musgrave Hall, Skelton, Cumberland, for **Skelton Bracelet.**

C.—770.

Class 111.—*Shorthorn Heifers, born in* 1923.

785 **I. (£15, & R. N. for Champion.[1])**—Sir Herbert Leon, Bart., Bletchley Park, Bletchley, for 51506 **Vanity**, roan, born Feb. 3; *s.* Balcairn Royal Diamond 160962, *d.* Vanity Fair *by* Prince, Rudolph 117072.

781 **II. (£10.)**—George Harrison, Gainford Hall, Darlington, for 49691 **Gainford Pauline 11th**, roan, born April 9; *s.* Collynie Challenger 148032, *d.* Gainford Pauline 4th *by* Collynie Mandarin 119552.

774 **III. (£5.)**—Fred Allison, Lilac Farm, Yedingham, Heslerton, Malton, for 45103 **Yedingham Mina 2nd**, dark roan, born Feb. 25; *s.* Allerston Standard 160698, *d.* 9755 Yedingham Mina *by* Doune Asterisk 130653.

780 **IV. (£4.)**—James Douglas Fletcher, Rosehaugh, Avoch, Ross-shire, for 48677 **Rosehaugh Broadhooks 10th**, red, born April 21; *s.* Dunglass Dauntless 171218, *d.* Suddie Broadhooks 2nd *by* Lieutenant Cruickshank 116230.

773 **V. (£3.)**—His Majesty the King, The Royal Farms, Windsor, for 44923 **Windsor Carnation**, dark roan, born April 22; *s.* Edgcote Flatter 125374, *d.* Hathaway 7th *by* Proud Victor 103447.

778 **R. N.**—Captain Sydney Dennis, Down Ampney House, Cricklade, for **Latton Moss Rose 3rd.**

H. C.—786. **C.**—779, 783.

Class 112.—*Shorthorn Heifers, born on or between January* 1 *and March* 31, 1924.

791 **I. (£15.)**—H.R.H. The Prince of Wales, K.G., Home Farm, Stoke Climsland, Cornwall, for **Climsland Orange Blossom 3rd**, red, born March 3; *s.* Collynie Herald 179685, *d.* Orange Flower 26 *by* Butterfly Knight 130029.

809 **II. (£10.)**—The Duke of Northumberland, K.G., Alnwick Castle, Northumberland, for 65756 **Alnwick Rose of Roxburgh**, white, born March 22; *s.* Aldsworth Duke 123844, *d.* Rose of Surrey (Vol. 60, p. 981) *by* Leading Favourite 112263.

801 **III. (£5.)**—Sir Bernard Greenwell, Bart., Marden Park, Woldingham, Surrey, for 61953 **Marden Crocus**, red and little white, born Jan. 17; *s.* Balcairn Warden 168707, *d.* 8799 Godinton Crocus *by* Dewlap's Royal Sovereign 125170.

792 **IV. (£4.)**—H.R.H. The Prince of Wales, K.G., for **Climsland Princess Royal 4th** 57511, red roan, born Jan. 30; *s.* Collynie Herald 179685, *d.* 9646 Climsland Princess Royal 2nd *by* Christian King 147900.

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[1] Champion Prize of £20 given by the Shorthorn Society, for the best Cow or Heifer in Classes 109 to 113. A Silver Medal is given by the Shorthorn Society to the Breeder of the Champion Cow or Heifer.

804 V. (£3.)—Ralph W. Jorgensen, The Berry Farm, South Cerney, Cirencester, for 63177 **Cerney Pink 5th,** red, born Feb. 12, bred by Mrs. G. T. Hutchinson, Sarsden, Kingham, Oxon; *s.* Edgcote Albion 142205, *d.* Village Pink (Vol. 63, p. 946) *by* Village Benjamin 123423.

788 R. N.—His Majesty the King, The Royal Farms, Windsor, for **Windsor Luxury 2nd.**

H. C.—808. C.—797, 805, 806.

Class 113.—*Shorthorn Heifers, born on or between April* 1 *and December* 31, 1924.

822 I. (£15.)—L. V. Garland, Greenbank, The Towans, Hayle, Cornwall, for 61573 **Towan Nonpareil,** red, born April 2; *s.* Bapton Prince George 168891, *d.* 40961 Southmore Nonpareil *by* Royal Style 159107.

818 II. (£10.)—Richard Cornelius, Lutwyche Hall, Much Wenlock, Salop, for 57815 **Lutwyche Eileen 2nd,** red roan, born April 5; *s.* Lutwyche Mint 173747, *d.* 31574 Eliza Lady 3rd *by* Balcairn White Eagle 153591.

826 III (£5.)—John Heaton, O.B.E., Low Startforth Hall, Barnard Castle, for 62424 **Startforth Augusta,** white, born April 23; *s.* Pellipar, Air Lord 183756, *d.* 37666 Balthayock Augusta 32nd *by* Norseman of Harviestoun 150829.

814 IV. (£4.)—His Majesty the King, The Royal Farms, Windsor, for 57500 **Windsor Butterfly,** dark roan, born April 20; *s.* Royal Gauntlet 159047, *d.* 27874 Butterfly of Durno *by* Millhills Sunbeam 157774.

832 V. (£3.)—J. M. Strickland, Bainesse, Catterick, for 68071 **Bainesse Mysie 6th,** roan, born May 6; *s.* Brandsby's Lord Ramsden 7th 169452, *d.* 3516 Settrington Mysie *by* Settrington Premier 133502.

825 R. N.—Arthur Green, Denton, Ben Rhydding, Leeds, for **Denton Princess.**

Herefords.

Class 114.—*Hereford Bulls, born on or before August* 31, 1922.

839 I. (£15, R. N. for Champion,[1] & R. N. for Champion.[2])—William Gray Farmer, Withington Court, Hereford, for **Aldersend Nonsuch** 38470, born Jan. 20, 1920, bred by W. Griffiths, Wilton Oaks, Tarrington, Herefordshire; *s.* Aldersend Wilton 34542, *d.* Nanette *by* Starlight 28754.

843 II. (£10.)—David Jenkins, Boverton Place, Llantwit Major, Cardiff, for **Energy** 40898, born Jan. 8, 1921, bred by S. Robinson, The Ovals, Kington, Herefordshire; *s.* Mansel Handyman 33954, *d.* Silk 2nd *by* Gainsborough 28303.

836 III. (£5.)—Edward Tipping Crook, Woodlands Hall, Bridgnorth, for **Priory Resolute** 41505, born Jan. 7, 1921, bred by L. Blackstad, Priory Farm, Clifford; *s.* Resolute 35537, *d.* Beauty 5th *by* Twyford Sultan 25845.

835 IV. (£4.)—George H. Bray, Dormington Court, Hereford, for **Wickton Comrade** 40297, born March 28, 1920, bred by Newman Brothers, Lower Wickton, Leominster; *s.* Patchwork 34099, *d.* Evesbatch Curly 5th *by* Tumbler 17588.

840 V. (£3.)—S. Goodwin, Ivington Court, Leominster, for **Wickton Overtime** 44347, born March 12, 1922, bred by Newman Brothers, Lower Wickton, Leominster; *s.* Patchwork 34099, *d.* Oyster Girl 33rd *by* Gay Laddy 30599.

842 R. N.—Captain R. T. Hinckes, Mansel Court, Hereford, for **Enterprise.**

H. C.—838. C.—841.

Class 115.—*Hereford Bulls, born on or between September* 1, 1922, *and August* 31, 1923.

853 I. (£15.)—Ernest Stevens, Chapel Farm, Elmey Castle, Pershore, for **Pershore Smiles** 44068, born Dec. 28, 1922; *s.* Ringer 31920, *d.* Joy *by* Masterpiece 29896.

852 II. (£10.)—Charles Henry Morris, Weston Court, Pembridge, for **Weston Papyrus** 44336, born Jan. 29, 1923; *s.* Crossways Opalo 38935, *d.* Pearl *by* Hardwick Regent 31573.

850 III. (£5.)—W. E. Lock, The Town, Castle Froome, Ledbury, for **Freetown Bruce** 43713, born April 28, 1923, bred by P. E. Bradstock, Freetown, Tarrington, Hereford; *s.* Aldersend Napier 35844, *d.* Barbara *by* Goodenough 33710.

855 R. N.—Edward Webb & Sons (Stourbridge), Ltd., Astwood Farm, Stoke Works, Bromsgrove, for **Colonel.**

H. C.—851. C.—848.

Class 116.—*Hereford Bulls, born on or between September* 1 *and November* 30, 1923.[3]

857 I. (£15, Champion,[1] & Champion.[2])—William Smith, The Leen, Pembridge, for **Leen Lionel,** born Nov. 10, 1923; *s.* Freetown Warrior 40971, *d.* Leen Maria (Vol. 52, p. 627) *by* Concord 36419.

859 II. (£10.)—H. Weston & Sons, The Bounds, Much Marcle, Dymock, for **Bounds Ocean,** born Oct. 2, 1923; *s.* Aldersend Licton 38467, *d.* Cherry 22nd (Vol. 52, p. 685) *by* Bounds Justice 36106.

858 III. (£5.)—John Walker, Knightwick Manor, Worcester, for **Knightwick Searchlight,** born Oct. 9, 1923; *s.* Fire Royal 39167, *d.* Knightwick Spinage *by* Eaton Hotspur 36681.

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[1] Champion Prize of £10 10*s.* given by the Hereford Herd Book Society, for the best Bull in Classes 114 to 118.

[2] Perpetual Silver Challenge Trophy, value One Hundred Guineas, given through the Hereford Herd Book Society, for the best Bull in Classes 114 to 118.

[3] Prizes given by the Hereford Herd Book Society.

Class 117.—*Hereford Bulls, born on or between December* 1, 1923, *and February* 29, 1924.

861 **I. (£15.)**—William Everall, Shrawardine Castle, Shrewsbury, for **Eyton Page**, born Dec. 23, 1923, bred by E. Craig Tanner, Eyton-on-Severn; *s.* Lion 32709, *d.* Eyton Satire 6th (Vol. 51, p. 672) *by* Prince Charming 29982

860 **II. (£10.)**—W. H. Donne Davies, The Pigeon House, Weston Beggard, Herefordshire, for **Dinam Morion** 44766, born Dec. 12, 1923, bred by D. Davies, M.P., The Offices, Llandinam, Mont.; *s.* Resolute 2nd 39895, *d.* Mary *by* Dinam Masterman 30491.

866 **III. (£5.)**—Charles Henry Morris, Weston Court, Pembridge, for **Weston Pembridge**, born Dec. 8, 1923; *s.* Freetown Warrior 40971, *d.* Leen Mouse (Vol. 51, p. 662) *by* Armistice 35893.

862 **IV. (£4.)**—H. R. Griffiths, Little Tarrington, Hereford, for **Tarrington Marques**, born Jan. 25, 1924; *s.* Bounds Landmark 40540, *d.* May Queen (Vol. 52, p. 353) *by* Aldersend May King 35843.

870 **R. N.**—Edward Craig Tanner, Eyton-on-Severn, Cross Houses, Salop, for **Eyton Paymaster.**

H. C.—865. **C.**—863.

Class 118.—*Hereford Bulls, born on or after March* 1, 1924.

874 **I. (£15.)**—Henry J. Dent, Perton Court, Stoke Edith, Herefordshire, for **Perton Gunner**, born March 4, 1924; *s.* Percentage 37655, *d.* Perton Select 2nd (Vol. 50, p. 475) *by* Eaton Silver 29693.

881 **II. (£10.)**—William Smith, The Leen, Pembridge, for **Freetown Rambler** 44879, born April 1, 1924, bred by P. E. Bradstock, Freetown, Tarrington; *s.* Russell Fairfax 44812, *d.* Ven Yusa *by* Goodenough 33710.

873 **III. (£5.)**—David Percival Barnett, Walterston, Llancarfan, Cowbridge, for **Master Robert**, born April 1, 1924; *s.* Walterston Sam 38309, *d.* Dolesome (Vol. 50, p. 870) *by* Sir Sam 33131.

879 **IV. (£4.)**—W. A. Newman, Tillington Court Farm, Burghill, Hereford, for **Wickton Andrew**, born March 6, 1924; *s.* Wickton Perfect 44249, *d.* Curly 3rd (Vol. 52, p. 506) *by* Patchwork 34099.

878 **V. (£3.)**—W. E. Lock, The Town, Castle Froome, Ledbury, for **Town Charmer**, born April 17, 1924; *s.* Congo 42124, *d.* Betty (Vol. 49, p. 639) *by* Bodenham Herald 31273.

880 **R. N.**—John Parr, Burton Linton, Ross, Herefordshire, for **Burton Cornerstone.**

H. C.—875. **C.**—883.

Class 119.—*Hereford Cows or Heifers (in-milk), born on or before August* 31, 1922.

891 **I. (£15, & R. N. for Champion.[1])**—James Pryce & Sons, Penmaes, Talgarth, for **Anxious.** (Vol. 52, p. 553), born Feb. 4, 1922, calved March 1, 1925; *s.* Leen Marplot 37179, *d.* Penmaes Pride *by* Spartan 34344.

888 **II. (£10.)**—Cecil Rowe English, Evesbatch Court, Bishop's Frome, Worcester, for **Maymorn** (Vol. 51, p. 370), born May 29, 1916, calved Nov. 24, 1924, bred by J. Rowlands, The Skilts, Malvern Link; *s.* Shelsley 26480, *d.* Movina *by* Carbine 28132.

890 **III. (£5.)**—Sir David B. Llewellyn, Bart., The Court, St. Fagans, Glam., **Crossways Opal** (Vol. 53, p. 681), born Jan. 6, 1919, calved April 12, 1925, bred by Owen Williams, Crossways, Cowbridge; *s.* Ringer 31920, *d.* Sheepcote Opal *by* Milton 25571.

886 **R. N.**—David Percival Barnett, Walterston, Llancarfan, Cowbridge, for **Lux.**

H C.—887.

Class 120.—*Hereford Heifers, born on or between September* 1, 1922, *and August* 31, 1923.

902 **I. (£15, & Champion.[1])**—Sir Maurice Levy, Bart., Great Glen, Leicester, for **Glen Dasher**, born March 4, 1923; *s.* Bounds Kyrle 38638, *d.* Nan (Vol. 53, p. 433) *by* Langoed Dandy 33892.

893 **II. (£10.)**—His Majesty the King, The Royal Farms, Windsor, for **Lavender Lass** (Vol. 54, p. 144), born Jan. 5, 1923; *s.* Lulsley Statesman 37327, *d.* Lovely 2nd *by* Paymaster 32892.

898 **III. (£5.)**—T. Walters Davies, The Cefn Farm, Pontypridd, for **Cefn Rosemary 7th**, born Feb. 1, 1923; *s.* Pyon's Victor 37791, *d.* Rosemary 5th *by* Clive Hope 3rd 36374.

905 **IV. (£4.)**—Lock & Shew, Paunton Court, Bishop's Frome, Worcester, for **Paunton Flo** (Vol. 54, p. 421), born Feb. 9, 1923; *s.* Bushman 38742, *d.* Fella *by* Gamester 28308.

896 **V. (£3.)**—Charles L. Coxon, Milton, Pembridge, for **Marstow Betty** (Vol. 54, p. 453), born Jan. 2, 1923, bred by C. Moreland, Marstow, Ross-on-Wye; *s.* Bounds Justice 36106, *d.* Piperoll *by* Newton Major 32843.

895 **R. N.**—Captain F. B. F. Bibby, Hardwicke Grange, Shrewsbury, for **Clive Light 4th.**

H. C.—897, 899. **C.**—907.

Class 121.—*Hereford Heifers, born on or between September* 1 *and November* 30, 1923.[2]

910 **I. (£15.)**—T. L. Walker, The Cedars, Broadwas-on-Teme, for **Ankerdine Fashion**, born Sept. 26, 1923; *s.* Oddfellow 39680, *d.* Ankerdine Famous (Vol. 52, p. 667) *by* Bodenham Goodwood 36043.

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[1] Champion Prize of £10 10*s.* given by the Hereford Herd Book Society for the best Cow or Heifer in Classes 119 to 122.

[2] Prizes given by the Hereford Herd Book Society.

908 II. (£10.)—Cecil Rowe English, Evesbatch Court, Bishop's Frome, Worcester, for **Rose Harmony 2nd**, born Sept. 8; *s.* Plansifter 37708, *d.* Rose Harmony (Vol. 51, p. 369) *by* Bellator 32217.

909 III. (£5.)—Ernest Stevens, Chapel Farm, Elmley Castle, Pershore, for **Pershore Castonette**, born Oct. 22; *s.* Bounds Keepsake 38622, *d.* Leen Timbril (Vol. 50, p. 913) *by* Mariner 28468.

911 R. N.—H. Weston & Sons, The Bounds, Much Marcle, Dymock, for **Bella 7th.**

Class 122.—*Hereford Heifers, born on or after December* 1, 1923.

913 I. (£15.)—His Majesty the King, The Royal Farms, Windsor, for **Peggy**, born Feb. 29, 1924; *s.* Lulsley Statesman 37327, *d.* Primula (Vol. 50, p. 329) *by* Paymaster 32892.

917 II. (£10.)—Thomas Haywood, Broom Park, Cleobury Mortimer, for **Lady Lilian 2nd**, born Jan. 4, 1924; *s.* Troubadour 2nd 41937, *d.* Lady Lilian (Vol. 52, p. 322) *by* Diamond 38978.

912 III. (£5.)—His Majesty the King, for **Eunice**, born March 9, 1924; *s.* Lulsley Statesman 37327, *d.* Envy (Vol. 50, p. 1010) *by* Admiral Beatty 31222.

922 IV. (£4.)—John Walker, Knightwick Manor, Worcester, for **Knightwick Delia**, born Dec. 29, 1923; *s.* Aldersend Prefect 38474, *d.* Brampton Garland 9th (Vol. 52, p. 622) *by* Brampton James 33412.

915 R. N.—Captain F. B. F. Bibby, Hardwicke Grange, Shrewsbury, for **Clive Polly 5th.**
H.C.—914.

Sussex.

Class 123.—*Sussex Bulls, born in or before* 1923.

923 I. (£15, **Champion,**[1] & **Champion.**[2])—J. Rayner Betts, Greenhill, Otham, Maidstone, for **Otham Chevalier** 5408, born June 17, 1921; *s.* Ticehurst Chevalier 6th 4854, *d.* Ockham Lumpy 4th 15597 *by* Ockham Prince 3367.

925 II. (£10.)—Campbell Newington, Oakover, Ticehurst, Sussex, for **Oakover Lad 18th** 5819, born April 27, 1922; *s.* Mabledon Lad 4326, *d.* Favourite 21st 13061 *by* Orchardmains Squire 2475.

924 III. (£5.)—J. Rayner Betts, for **Ridge Sundial** 5860, born May 11, 1923, bred by G. R. Bennett, Old House, West Hoathly; *s.* Sundridge 4573, *d.* Lock Heedless 6th 15992 *by* North Chapel Premier 2645.

Class 124.—*Sussex Bulls, born in* 1924.

931 I. (£15, **R. N. for Champion,**[1] and **R. N. for Champion.**[2])—Campbell Newington, Oakover, Ticehurst, Sussex, for **Oakover Lad 23rd** 6256, born Jan. 2; *s.* Mabledon Lad 4326, *d.* Favourite 21st 13061 *by* Orchardmains Squire 2475.

930 II. (£10.)—L. O. Johnson, Peppers, Ashurst, Steyning, for **Kings Barn Sunbright** 6213, born Jan. 5; *s.* Sundridge 4573, *d.* Avisford Heedless 3rd 19881 *by* Red Miller 4918.

932 III. (£5.)—Major J. R. Warren, Handcross Park, Haywards Heath, for **Handcross Lad** 6288, born Jan. 25; *s.* Oakover Lad 10th 5340, *d.* Dale Graceful 1st 19264 *by* Brownings Price 7th 4675.

Class 125.—*Sussex Cows or Heifers (in-milk), born in or before* 1922.

934 I. (£15, & **Champion.**[3])—Ellice Ezra, Lock, Partridge Green, Sussex, for **Drungewick Daisy 16th** 19107, born Feb. 26, 1920, calved Jan. 15, 1925, bred by the late E. E. Braby, Drungewick Manor, Rudgwick, Sussex; *s.* Drungewick A One 17th 4582, *d.* Drungewick Daisy 14th 16712 *by* Drungewick Marksman 3rd 3274.

933 II. (£10.)—J. Rayner Betts, Greenhill, Otham, Maidstone, for **Otham Lady 2nd** 19718, born June 21, 1921, calved May 14, 1925; *s.* Ticehurst Chevalier 6th 4854, *d.* Sheldwich Lady 33rd 16044 *by* Nash Premier 6th 3446.

935 III. (£5.)—L. O. Johnson, Peppers, Ashurst, Steyning, for **Ewhurst Crystal** 20478, born Feb. 10, 1922, calved April 1, 1925, bred by H. W. Coleman, Reigate; *s.* Thurston Red Rover 5443, *d.* Brownings Crystal 1st 16280 *by* Apsley Albert 2nd 2706.

Class 126.—*Sussex Heifers, born in* 1923.

938 I. (£15, & **R. N. for Champion.**[3])—Ellice Ezra, Lock, Partridge Green, Sussex, for **Ridge Charmer 2nd** 21059, born Jan. 28, bred by G. R. Bennett, Old House, West Hoathly, Sussex; *s.* Avisford Prince 5484, *d.* Sheldwich Knelle Charmer 17851 *by* Nash Masterpiece 2nd 3723.

939 II. (£10.)—L. O. Johnson, Peppers, Ashurst, Steyning, for **Ridge Bouncing Beauty 2nd** 21058, born Jan. 27, bred by G. R. Bennett, West Hoathly; *s.* Ridge Eclipse 5405, *d.* Lynwick Beauty 24th 16663 *by* Lynwick Rufus 2nd 3563.

936 III. (£5.)—J. Rayner Betts, Greenhill, Otham, Maidstone, for **Otham Lumpy 5th** 21067, born April 6; *s.* Ticehurst Chevalier 6th 4854, *d.* Ockham Lumpy 4th 17855 *by* Golden Noble 9th 3877.
C.—937, 940.

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[1] Perpetual Silver Challenge Trophy, value One Hundred Guineas, given through the Sussex Herd Book Society for the best Bull in Classes 123 and 124.

[2] Champion Silver Medal given by the Sussex Herd Book Society for the best Bull in Classes 123 and 124.

[3] Champion Silver Medal given by the Sussex Herd Book Society for the best Cow or Heifer in Classes 125 to 127.

Class 127.—*Sussex Heifers, born in* 1924.

945 I. (£15.)—Ellice Ezra, Lock, Partridge Green, Sussex, for **Lock Daisy** 21916, born Feb. 12; *s.* Jacobite 5116, *d.* Drungewick Daisy 16th 19107 *by* Drungewick A One 7th 4582.

949 II. (£10.)—Major J. R. Warren, Handcross Park, Haywards Heath, for **Handcross Daisy 1st** 22389, born Feb. 7; *s.* Oakover Lad 10th 5340, *d.* Huggetts Daisy 17th 16740 *by* Shillinglee Gold 7th 2681.

946 III. (£5.)—Lord Leconfield, Petworth House, Petworth, Sussex, for **Petworth Daisy** 22157, born Jan. 19; *s.* North Chapel President 2nd 5126, *d.* Lynwick Daisy 16th 16066 *by* Dogwood 3227.

H. C.—947. C.—948.

Welsh.

Class 128.—*Welsh Bulls, born on or before November* 30, 1922.

952 I. (£15, & Champion.[1])—R. M. Greaves, Wern, Portmadoc, for **Wern Sentry** 1542, born Sept. 20, 1919; *s.* Snowdon Idwal 1192, *d.* Wern Ideal 1280 *by* Duke of Wellington 294.

957 II. (£10.)—Lord Penrhyn, Penrhyn Castle, Bangor, for **Harold of Penrhyn** 1984, born Feb. 2, 1921; *s.* Musketeer of Penrhyn 1140, *d.* Hester 3rd of Penrhyn 2311 *by* Madryn Cawr 488.

951 III. (£5.)—C. H. Lloyd Edwards, Nanhoron, Pwllheli, for **Snowdon Caradoc** 1772, born April 13, 1920, bred by the University College of North Wales, Bangor; *s.* Snowdon Emperor 1193, *d.* Snowdon Rose 1923 *by* Wern Emperor 50.

956 IV. (£4.)—Sir Edward Naylor-Leyland, Nantclwyd Hall, Ruthin, for **Ronald of Nantclwyd** 2359, born June 16, 1922; *s.* Bodelwa Botha 1267, *d.* Penmynydd Mabli 3601 *by* Penmynydd Hywel 1128.

H. C.—954.

Class 129.—*Welsh Bulls, born on or between December* 1, 1922, *and November* 30, 1923.[2]

970 I. (£15, & R. N. for Champion.[1])—University College of North Wales, College Farm, Aber, Bangor, for **Snowdon Brân** 2645, born July 11, 1923; *s.* Madryn Laddie 1403, *d.* Bryncian Nanw 4235 *by* Bodelwa Volunteer 1273.

971 II. (£10.)—Arthur W. Willmer, Waen Isa, Dolgelley, for **Waen Gordon,** born Aug. 10, 1923; *s.* Northgate Boy 2040, *d.* Waen Martha 3871 *by* Blodgorn 1145.

969 III. (£5.)—W. T. Prytherch, Bryn Gof, Llanfair P. G., Anglesey, for **Cefnamwlch Champion** 2442, born Feb. 7, 1923, bred by Major W. H. Wynne Finch, Cefnamwlch, Tydweiliog; *s.* Bodrick Avro 1278, *d.* Penllyn Sally 3851 *by* Voelas Minden 557.

963 IV. (£4.)—Dinam Estates Company, Llandinam Hall Farm, Llandinam, Mont., for **Dinam Lancer,** born Aug. 26, 1923; *s.* Dinam Chief 1618, *d.* Glasfryn Linda 4053 *by* Glynllivon Captain 996.

H. C.—966.

Class 130.—*Welsh Bulls, born on or between December* 1, 1923, *and June* 30, 1924.[2]

973 I. (£15.)—R. M. Greaves, Wern, Portmadoc, for **Wern Duke,** born Dec. 11, 1923; *s.* Wern Sentry 1542, *d.* Wern Irene 1281 *by* Duke of Wellington 294.

972 II. (£10.)—J. Crosland Graham, Clwyd Hall, Ruthin, for **Gwyngyll Triumph,** born Dec. 2, 1923, bred by W. T. Prytherch, Bryn Gof, Llanfair P.G.; *s.* Wern Triumph 1826, *d.* Myfanwy Gwyngyll 2nd 4526 *by* Mynach Du 1186.

977 III. (£5.)—Norman L. Moon, Llandrillo, Merionethshire, for **Corwen Messenger,** born March 6, 1924; *s.* Ty Croes Volunteer 2129, *d.* Black Bess 4th 2022 *by* Nanhoron Maxim 606.

978 IV. (£4.)—Major Eric J. W. Platt, Madryn Park, Aber, North Wales, for **Madryn Glaxo,** born Feb. 14, 1924; *s.* Rampart of Penrhyn 1752, *d.* Madryn Nancy 3rd 5331 *by* Rhydygarnedd General Byng 1179.

975 V. (£3.)—S. H. Jenks, Pilsdon Manor, Bridport, for **Pilsdon Boy,** born April 27, 1924; *s.* Ty Croes Llewelyn 2376, *d.* Bute Min Arfron 3174 *by* Stanley 954.

981 R. N.—University College of North Wales, College Farm, Aber, Bangor, for **Snowdon Llenfer.**

H. C.—982, 983.

Class 131.—*Welsh Bulls, born on or after July* 1, 1924.

985 I. (£15.)—S. H. Jenks, Pilsdon Manor, Bridport, for **Pilsdon Baldwyn,** born Aug. 13; *s.* Ty Croes Llewelyn 2376, *d.* Penrhos Branwen 4640 *by* Nipper of Penrhyn 1131.

986 II. (£10.)—O. Parry Jones, Plas Llechylched, Valley, Anglesey, for **Plas Samson,** born Aug. 8; *s.* Plas Yswain 2082, *d.* Plas Gwenllian 2nd 5143 *by* Snowdon Emlyn 1477.

987 III. (£5.)—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for **Haulfryn King,** born Oct. 7; *s.* Puntygwair King 2346, *d.* Puntygwair Primrose 4127 *by* Bachellyn Goalkeeper 1112.

H. C.—988.

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[1] Champion Prize of £5 given by the Welsh Black Cattle Society for the best Bull in Classes 128 to 131.

[2] Prizes, except Fourth and Fifth, given by the Welsh Black Cattle Society.

Class 132.—*Welsh Cows (in-milk), born on or before November 30,* 1921.

993 **I. (£15, & R. N. for Champion.[1])**—S. H. Jenks, Pilsdon Manor, Bridport, for **Pilsdon Mair** 2966, born March 28, 1916, calved Nov. 7, 1925, bred by Vaynol Trustees, Vaynol Park, Bangor; *s.* Welsh Emperor 658, *d.* Mwynig 7th 1903 *by* Vaynol Duke 397.

999 **II. (£10.)**—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for **Puntygwair Primrose** 4127, born May 22, 1919, calved Oct. 7, 1924, bred by J. W. Holland, Cim, Abersoch; *s.* Bachellyn Goalkeeper 1112, *d.* Molly 6th of Penrhyn 2927 *by* Nanhoron Model 608.

994 **III. (£5.)**—D. R. Lloyd, Llyslew, Gaerwen, for **Castell Megan** 4922, born March 17, 1921, calved April 5, 1925, bred by Edward Gabriel, Castell Mawr, Bryncrug, Towyn; *s.* Bwlchgwyn Gawr 1291, *d.* Beauty 4027 *by* Castell King 707.

1004 **IV. (£4.)**—Major John Charles Wynne-Finch, Voelas, Bettws-y-Coed, for **Voelas Thynne** 4794, born June 28, 1920, calved Feb. 15, 1925; *s.* Admiral 1144, *d.* Voelas Patience 3899 *by* Voelas Llewelyn 556.

998 **V. (£3.)**—Sir George A. E. T. Gervis Meyrick, Bart, Hinton Admiral Christchurch, Hants, and Bodorgan, Anglesey, for **Mair 2nd** 1831, born Nov. 10, 1912, calved Oct. 24, 1924, bred by Lord Penrhyn, Penrhyn Castle, Bangor; *s.* Duke of Wellington 294, *d.* Mair 388.

995 **R. N.**—D. R. Lloyd, for **Waen Martha 2nd.**

H. C.—1002.

Class 133.—*Welsh Heifers (in-milk), born on or between December* 1, 1921, *and November* 30, 1922.[2]

1007 **I. (£15.)**—J. Crosland Graham, Clwyd Hall, Ruthin, for **Cim Doli** 5823, born Feb. 23, 1922, calved Dec. 16, 1924, bred by J. W. Holland, Cim, Abersoch; *s.* Cim Chamberlain 1908, *d.* Cim Mary 4999 *by* Lord Roberts 921.

1010 **II. (£10.)**—R. A. C. Pugh, Voelas, Glendyfi, for **Mwynig of Halford** 5632, born March 15, 1922, calved Dec. 5, 1924, bred by Allen & Rogers, Halford Farm, Craven Arms; *s.* Fancy of Penrhyn 1646, *d.* Tregarn Mwynig 2nd 2838 *by* Rhydygarnedd Cawryn 649.

1006 **III. (£5.)**—Richard John George, Llwyn, Chwilog, Carnarvonshire, for **Hendre Doli** 5687, born March 17, 1922, calved Dec. 3, 1924, bred by G. G. Davies, Hendre Bach, Clynnog, Carnarvonshire; *s.* Bomb of Penrhyn 1136, *d.* Hendre Bach Gwladys 2545 *by* Rhydgarnedd Cawryn 649.

H. C.—1009. **C.**—1005.

Class 134.—*Welsh Heifers, born on or between December* 1, 1922, *and November* 30, 1923.

1032 **I. (£15, & Champion.[1])**—Major John Charles Wynne-Finch, Voelas, Bettws-y-Coed, for **Voelas Wish** 7320, born May 25, 1923; *s.* Plas-y-bryn Champion 1744, *d.* Voelas Ruby 3908 *by* Stamp of Penrhyn 1132.

1027 **II. (£10.)**—Sir Edward Naylor-Leyland, Nantclwyd Hall, Ruthin, for **Violet of Nantclwyd** 6866, born Sept. 26, 1923; *s.* Bodelwa Botha 1267, *d.* Madryn Gwenllian 5th 4492 *by* Jack Johnson 799.

1024 **III. (£5.)**—Sir George A. E. T. Gervis Meyrick, Bart., Hinton Admiral, Christchurch, Hants, and Bodorgan, Anglesey, for **Bodorgan Blodwen** 6930, born Jan. 17, 1923; *s.* Penmynydd Caswallon 2062, *d.* Bodelwa Shan 3rd 4153 *by* Bodelwa Volunteer 1273.

1025 **IV. (£4.)**—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for **Puntygwair Ethel** 6649, born Feb. 8, 1923, bred by J. W. Holland, Cim, Abersoch; *s.* Cim Chamberlain 1908, *d.* Puntygwair Daffodil 4128 *by* Bachellyn Turk 1255.

1029 **V. (£3.)**—Lord Stanley of Alderley, Penrhos, Holyhead, for **Angharad** 7153, born Dec. 20, 1922; *s.* Bodelwa Jester 1574, *d.* Mona 3025 *by* Nanhoron President 604.

1021 **R. N.**—Lord Harlech, Glyn, Talsarnan, for **Glyn Nymph.**

H. C.—1019.

Class 135.—*Welsh Heifers, born on or between December* 1, 1923, *and June* 30, 1924.

1038 **I. (£15.)**—O. E. Hughes, Bodelwa, Ty Croes, Anglesey, for **Bodelwa Nella,** born Jan. 7, 1924; *s.* Penmynydd Caswallon 2062, *d.* Bodelwa Nora 2nd 5031 *by* Bodelwa Volunteer 1273.

1044 **II. (£10.)**—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for **Glanffraw Martha,** born Feb. 18, 1924, bred by E. D. Williams, Tyddyn Hwrdd, Anglesey; *s.* Taliesin 1778, *d.* Martha of Penrhyn 2888 *by* Madryn Cawr 488.

1040 **III. (£5.)**—S. H. Jenks, Pilsdon Manor, Bridport, for **Pilsdon Bernice,** born Dec. 22, 1923; *s.* Menai King 2290, *d.* Eirlys 3029 *by* Nanhoron President 604.

1049 **IV. (£4.)**—Major John Charles Wynne-Finch, Voelas, Bettws-y-Coed, for **Voelas Zoe,** born March 23, 1924; *s.* Plas-y-bryn Champion 1744, *d.* Voelas Rowan 3906 *by* Stamp of Penrhyn 1132.

1047 **V. (£3.)**—Lord Stanley of Alderley, Penrhos, Holyhead, for **Penrhos Eirwen,** born June 7, 1924; *s.* Owain Glyndwr 2046, *d.* Penrhos Menora 4643 *by* Cadwaladr 1293.

1042 **R. N.**—D. R. Lloyd, Llyslew, Gaerwen, Anglesey, for **Llyslew Martha 2nd.**

H. C.—1036.

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[1] Champion Prize of £5 given by the Welsh Black Cattle Society for the best Cow or Heifer in Classes 132 to 136.

[2] Prizes given by the Welsh Black Cattle Society.

Class 136.—*Welsh Heifers, born on or after July* 1, 1924.

1059 I. (£15.)—Major John Charles Wynne-Finch, Voelas, Bettws-y-Coed, for **Voelas Ysolde**, born Aug. 21; *s.* Plasbryn Champion 1744, *d.* Voelas Uwchaled 5622 *by* Admiral 1144.

1053 II. (£10.)—S. H. Jenks, Pilsdon Manor, Bridport, for **Pilsdon Brenda**, born Dec. 24; *s.* Trusty of Penrhyn 2372, *d.* Tyddyn Mwynig 6119 *by* Bachellyn Haig 1847.

1060 III. (£5.)—Major John Charles Wynne-Finch, for **Voelas Ystrad**, born Aug. 17; *s.* Voelas Viceroy 2381, *d.* Voelas Violet 6439 *by* Admiral 1144.

1054 IV. (£4.)—Miss Eurgain Lort, Castlemai, Carnarvon, for **Castlemai Dusky**, born July 4; *s.* Castlemai Nelson 2439, *d.* Castlemai Menai Lodes *by* Cambria Blodgorn 1296.

H. C.—1056.

Class 137.—*Welsh Cows or Heifers (in-milk), any age, whose milk yield has been officially recorded and checked.*[1]

1002 I. (£15, & Champion.[2])—Lord Penrhyn, Penrhyn Castle, Bangor, for **Hester 3rd of Penrhyn** 2311, born June 11, 1914, calved May 29, 1925; *s.* Madryn Cawr 488, *d.* Voelas Hester 1242 *by* Eifionydd 417.

992 II. (£10.)—J. Crosland Graham, Clwyd Hall, Ruthin, for **Bodrida Janet** 4690, born March 19, 1920, calved Dec. 5, 1924, bred by Hugh Williams, Bodrida, Gaerwen; *s.* Cynedda Gwynedd 1041, *d.* Waen Janet 3144 *by* Waen Mascot 671.

1000 III. (£5.)—Norman L. Moon, Llandrillo, Merionethshire, for **Eleri Gwynedd** 3453, born Oct. 15, 1918, calved Oct. 19, 1924, bred by Miss Jones, Gwredog, Rhosgoch, Anglesey; *s.* Cynedda Gwynedd 1041, *d.* Elspeth Gwynedd 1345 *by* Cwyfan Bob 76.

Longhorns.

Class 138.—*Longhorn Bulls, born in or before* 1923.

1061 I. (£15.)—Lord Doverdale, Westwood Park, Droitwich, for **Arbury Alexander** 851, dark brindle, born Feb. 12, 1921, bred by Sir Francis Newdegate, K.C.M.G., Arbury, Nuneaton; *s.* Arbury Lieutenant 2nd 722, *d.* Arbury Abronia *by* Arbury King 568.

1062 II. (£10.)—The Exors. of the late William Hanson Sale, Arden Hill, Artherstone, for **Arden Warrior** 806, brindle and white, born Oct. 7, 1920, bred by the late W. H. Sale; *s.* Whitacre Warrior 800, *d.* Waterloo 18th *by* Stowe Marmion 709.

1063 III. (£5.)—W. E. Swinnerton, Manor House, Over Whitacre, Birmingham, for **Stivichall Conquest** 879, red brindle and white, born March 14, 1923; *s.* Whitacre Conqueror 844, *d.* Stivichall Glad Eyes *by* Eastwell Evens 664.

1064 R. N.—Bertram Worrall, Steeple Aston, Oxford, for **Whitacre Punch.**

Class 139.—*Longhorn Bulls, born in* 1924.

1065 I. (£15.)—J. W. Swinnerton-Weston, Over Whitacre House, Birmingham, for **Arden Select**, brindle and white, born March 3, bred by the late William Hanson Sale, Arden Hill, Atherstone; *s.* Arden Warrior 806, *d.* Croft Sunlight (Vol. 10, p. 25) *by* Poles Walter 687.

Class 140.—*Longhorn Cows or Heifers (in-milk), born in or before* 1922.

1066 I. (£15.)—Lord Doverdale, Westwood Park, Droitwich, for **Putley Brilliant** (Vol. 10 p. 23), dark brindle and white, born Dec. 9, 1915, calved May 20, 1915, bred by J. L. and, A. Riley, Putley, Ledbury; *s.* Poles Czar 685, *d.* Putley Beauty *by* Putley Triumph 549.

1068 II. (£10.)—Alfred Wheeler, Chippinghurst, Cuddesdon, Oxford, for **Lady Violet of Kent** (Vol. 11, p. 22), brindle and white, born April 8, 1918, calved June 22, 1925, bred by H. B. Parsons, Eastwell, Ashford, Kent; *s.* Admiral 632, *d.* Violet of Dersingham *by* King of Eastwell 736

1067 III. (£5.)—The Exors. of the late William Hanson Sale, Arden Hill, Atherstone, for **Lady Woodbine of Kent** (Vol. 12, p. 22), brindle and white, born July 4, 1919, calved June 17, 1925, bred by the late W. H. Sale; *s.* Duke of Kent 771, *d.* Lady Waterloo 2nd of Kent *by* Eastwell Eagle 500.

1069 R. N.—Alfred Wheeler, for **Putley Edith 4th.**

Class 141.—*Longhorn Heifers, born in* 1923 *or* 1924.[3]

1074 I. (£15.)—J. W. Swinnerton-Weston, Over Whitacre House, Birmingham, for **Sunrise of Chippinghurst** (Vol. 13, p. 27), red and white, born Jan. 13, 1923, bred by Alfred Wheeler, Chippinghurst Manor, Oxfordshire; *s.* Chippinghurst Cricket 811, *d.* Sunrise of Studley *by* Eastwell Energy 732.

1072 II. (£10.)—Lord Doverdale, Westwood Park, Droitwich, for **Westwood Kathleen** (Vol. 13, p. 31), dark brindle and white, born May 9, 1923; *s.* Arbury Alexander 851, *d.* Putley Phyllis (Vol. 2, p. 23).

1075 III. (£5.)—Alfred Wheeler, Chippinghurst, Cuddesdon, Oxford, for **Spice of Chippinghurst** (Vol. 13, p. 26), red brindle and white, born Jan. 16, 1923; *s.* Chippinghurst Greatheart 812, *d.* Susan of Studley *by* Eastwell Evens 664.

1076 R. N.—Bertram Worrall, Steeple Aston, Oxford, for **Freda of Rousham.**

H. C.—1073.

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[1] Prizes given by the Welsh Black Cattle Society.

[2] Silver Salver given by the Welsh Black Cattle Society for the First Prize animal in Class 137.

[3] Prizes given by the Longhorn Cattle Society.

Aberdeen-Angus.

Class 142.—*Aberdeen-Angus Bulls, born on or before November* 30, 1922.

1078 **I. (£15, Champion,[1] Champion,[2] & R. N. for Champion.[3])**—William T. Elgey, Corpslanding, Cranswick, East Yorks, for **Geordie of Goodwood** 48285, born Feb. 5, 1920, bred by the Duke of Richmond and Gordon, K.G., Goodwood; *s.* Blackfriar of Bywell 40870, *d.* Rose Mary of Goodwood 59032 *by* Benedict of Wicken 34077.

1077 **II. (£10.)**—Viscount Allendale, Dilston, Corbridge-on-Tyne, for **Electricity of Bywell** 52341, born Jan. 12, 1922; *s.* Exbert 45895, *d.* Eliana 59159 *by* Pride's Reviver 33660.

1080 **III. (£5.)**—Lord Penrhyn, Wicken Park, Stony Stratford, for **Wicken Idiom** 51697, born Feb. 7, 1921; *s.* Juno of Ballindalloch 39879, *d.* Ideal Pride of Wicken 8th 60907 *by* Wicken Recluse 37110.

1083 **IV. (£4.)**—The Duke of Richmond and Gordon, K.G., Goodwood, Chichester, for **Perion of Goodwood** 51195, born Dec. 18, 1920; *s.* Elfarcombe of Goodwood 45573, *d.* Ruth of Haynes 6th 43912 *by* Gay Boy of Danesfield 21967.

Class 143.—*Aberdeen-Angus Bulls, born on or between December* 1, 1922, *and November* 30, 1923.

1092 **I. (£15, R. N. for Champion,[1] R. N. for Champion,[2] & R. N. for Champion.[4])**—Peter D. Robertson, Castlecraig, Nigg, Ross-shire, for **Jupiter of Castlecraig** 55161, born April 12, 1923; *s.* Everest of Bleatow 45862, *d.* Joan of Castlecraig 57121 *by* Watchman of Ballindalloch 37101.

1088 **II. (£10.)**—Sir Leonard Brassey, Bart., M.P., Apethorpe, Peterborough, for **Black Jester** 54062, born Dec. 10, 1922; *s.* Black Knight of Auchterarder 45102, *d.* Joanna of Apethorpe 66478 *by* Eclipse of Ballindalloch 43266.

1086 **III. (£5.)**—Viscount Allendale, Dilston, Corbridge-on-Tyne, for **Gerald of Bywell** 54929, born Dec. 19, 1922; *s.* Placeman of Bywell 48929, *d.* Grace of Auchterarder 53067 *by* Romeo of Ballindalloch 29941.

Class 144.—*Aberdeen-Angus Bulls, born on or between December* 1, 1923, *and November* 30, 1924.

1104 **I. (£15.)**—Henry C. Venning, Willett, Bicknoller, Taunton, for **Viceroy of Willett** 58180, born March 15, 1924; *s.* Envoy of Candacraig, 52463, *d.* Velvet of Bywell 61612 *by* Proud George 38595.

1094 **II. (£10.)**—Viscount Allendale, Dilston, Corbridge-on-Tyne, for **Grandee of Bywell** 57159, born Jan. 4, 1924; *s.* Electricity of Bywell 52341, *d.* Grace of Auchterarder 53067 *by* Romeo of Ballindalloch 29941.

1101 **III. (£5.)**—John McGregor Petrie, Asleid, New Deer, Aberdeenshire, for **El Bonisimo** 56621, born March 29, 1924; *s.* Boxer of Ballindalloch 47409, *d.* Eveaphora 65554 *by* Earl Tauras of Ballindalloch 39254.

1103 **IV. (£4.)**—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Ethus of Morlich** 56885, born Feb. 5, 1924, bred by George Cran, Morlich; *s.* Essence of Bleaton 45779, *d.* Ethic of Morlich 64306 *by* Eclipse 2nd of Morlich 39277.

1093 **V. (£3.)**—H.R.H. The Prince of Wales, K.G., Bellever Farm, Princetown, Devon, for **Hayston Bright Eclipse** 57194, born Dec. 25, 1923, bred by James Whyte, Hayston, Glamis; *s.* Eclipse of Milford 52263, *d.* Beauty 105th of Hayston 68458 *by* Perinthian 44320.

Class 145.—*Aberdeen-Angus Cow or Heifers (in-milk), born on or before November* 30, 1922.

1107 **I. (£15, Champion,[3] & Champion.[4])**—J. J. Cridlan, Maisemore Park, Gloucester, for **Eve 3rd of Maisemore** 64328, born May 28, 1919, calved Dec. 2, 1924; *s.* Idyll of Maisemore 36219, *d.* Eve of Maisemore 52161 *by* Brave Briton of Maisemore 30218.

1108 **II. (£10.)**—John McGregor Petrie, Asleid, New Deer, Aberdeenshire, for **Evaboxa** 72547, born Jan. 29, 1922, calved Dec. 9, 1924; *s.* Boxer of Ballindalloch 47409, *d.* Evaphora 65554 *by* Earl Tauras of Ballindalloch 39254.

1109 **III. (£5.)**—Charles Thomas Scott, Buckland Manor, Broadway, Worcs., for **Elluma 2nd of Buckland** 72814, born Dec. 2, 1921, calved Dec. 9, 1924; *s.* Etruman of Bleaton 41498, *d.* Elluma 3rd 42443 *by* Euthalito 21896.

H. C.—1112.

Class 146.—*Aberdeen-Angus Heifers, born on or between December* 1, 1922, *and November* 30, 1923.

1115 **I. (£15.)**—J. J. Cridlan, Maisemore Park, Gloucester, for **Pride of Maisemore 25th** 73797, born Dec. 28, 1922; *s.* George R. of Ballindalloch 30611, *d.* Pride of Maisemore 21st 69157 *by* Everjilt of Maisemore 45868.

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[1] Perpetual Silver Challenge Trophy, value One Hundred Guineas, given through the Aberdeen-Angus Cattle Society, for the best Bull in Classes 142 to 144.

[2] Champion Gold Medal given by the English Aberdeen-Angus Cattle Association for the best animal of the opposite sex to that of the animal awarded the Champion Gold Medal of the Aberdeen-Angus Cattle Society in Classes 142 to 147.

[3] Champion Gold Medal given by the Aberdeen-Angus Cattle Society for the best animal in Classes 142 to 147.

[4] Silver Medal given by the Argentine Aberdeen-Angus Association, for the best animal, bred by Exhibitor, in Classes 142 to 147.

1117 II. (£10.)—Charles Doxford, Old Burdon, New Seaham S.O., Co. Durham, for **Virtue of Bywell** 73363, born March 10, 1923, bred by Viscount Allendale, Dilston Hall, Corbridge-on-Tyne; *s.* Placeman of Bywell 48929, *d.* Vita of Bywell 53639 *by* Juan Eric 30733.

1120 III. (£5.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Queen 4th of Basildon** 74719, born May 13, 1923; *s.* Baron Eros of Bleaton 47225, *d.* Queen Alexandra 55835 *by* Gardafui of Ballindalloch 29056.

1118 IV. (£4.)—William T. Elgey, Corpslanding, Cranswick, East Yorks, for **Emily of Corpslanding** 73943, born Dec. 1, 1922; *s.* Geordie of Goodwood 48285, *d.* Esme of Corpslanding 66932 *by* Prince Toreador 44465.

Class 147.—*Aberdeen-Angus Heifers, born on or between December* 1, 1923, *and November* 30, 1924.

1130 I. (£15.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Elite 2nd of Basildon** 76930, born Jan. 26, 1924; *s.* Baron Eros of Bleaton 47225, *d.* Evileric 58364 *by* Junior Eric 34725.

1129 II. (£10.)—Major J. A. Morrison, D.S.O., for **Beryl 2nd of Basildon** 76927, born March 6, 1924; *s.* Prince Francis 51322, *d.* Bartering Maid 68764 *by* Watchman of Ballindalloch 37101.

1127 III. (£5.)—The Earl of Mexborough, Methley Park, Leeds, for **Methley Mida** 76906, born Jan. 25, 1924; *s.* Basque of Doonholm 51781, *d.* Molly Malone 3rd of Newlands 69285 *by* Jaunty Eric 43880.

1123 IV. (£4.)—Viscount Allendale, Dilston, Corbridge-on-Tyne, for **Elvira of Bywell** 75660, born Dec. 17, 1923; *s.* Electricity of Bywell 52341, *d.* Elvena of Bywell 2nd 63883 *by* Ellicott 41313.

1126 V. (£3.)—William T. Elgey, Corpslanding, Cranswick, East Yorks, for **Erica 3rd of Corpslanding** 76225, born Dec. 3, 1923; *s.* Geordie of Goodwood 48285, *d.* Dalvey Erica 2nd 48929 *by* Benin of Ballindalloch 24149.

Cup.[1]—J. J. Cridlan, Maisemore Park, Gloucester.

Dun and Belted Galloways.

Class 148.—*Dun Galloway Bulls, born on or before November* 30, 1924.[2]

1135 I. (£15.)—The Marquis of Bute, K.T., Dumfries House, Old Cumnock, Ayrshire, for **Ochiltree Challenger of Grimgrew** 14D, born Nov. 20, 1921; *s.* Mochrum Hawker 11D, *d.* Ochiltree Maysie of Grimgrew 105D.

Class 150.—*Belted Galloway Bulls, born on or before November* 30, 1924.[2]

1139 I. (£15.)—James Douglas Brown, Knockbrex, Kirkcudbright, for **Knockbrex Pollux** 49B, born Feb. 22, 1921; *s.* Knockbrex Viking 50B, *d.* Knockbrex Pansy 183B *by* Boreland Champion 21B.

Class 151.—*Belted Galloway Cows or Heifers (in-milk), born on or before November* 30, 1922.

1143 I. (£15.)—James Douglas Brown, Knockbrex, Kirkcudbright, for **Knockbrex Lady Belinda**, 175B, born Aug. 19, 1920, calved April 16, 1925; *s.* Knockbrex Viking 50B, *d.* Knockbrex Empress 172B *by* Knockbrex First Choice 46B.

1147 II. (£10.)—Sir Ian Hamilton, Lullenden Farm, East Grinstead, for **Allington Dandelion** 118BD, born in 1918, calved Oct. 22, 1924, bred by James Brown, Knockbrex, Kirkcudbright; *s.* Knockbrex Certainty 44B.

1149 III. (£5.)—James Westoll, Jun., Glingerbank, Longtown, Cumberland, for **Mark Dally** 206B, born May 8, 1918, calved Jan. 14, 1925, bred by Major M'Calmont, Ireland.

1144 R. N.—Major Ian Bullough, Drury Lane Farm, Redmarley, Newent, for **Eastington Furze.**

Galloways.

Class 152.—*Galloway Bulls, born on or before November* 30, 1924.

1153 I. (£15.)—D. and J. Little, Whitehill, Corrie, Lockerbie, for **Punch of Dalwyne** 13727, born Feb. 1, 1918, bred by John Blackley, Lochfield, Dumfries; *s.* Ideal of Thornichill 12342, *d.* Jasmine 22794 *by* Matthew Mark 10726.

1151 II. (£10.)—Sir Robert W. Buchanan-Jardine, Bart., Castle Milk, Lockerbie, for **Warbond 2nd of Corriehalls** 14837, born March 16, 1921, bred by D. and J. Little, Whitehill, Corrie, Dumfriesshire; *s.* Kennedy of Killearn 14106, *d.* Nettie 3rd of Corriehalls 25993 *by* Matthew Mark 10726.

1152 III. (£5.)—Robert Graham, Chapel of Logan, Half Morton, Canonbie, for **Jovial of Barnsoul** 15593, born March 8, 1924, bred by the Exors. of the late Herbert Haggas, Barnsoul, Shawhead, Dumfries; *s.* Random 14390, *d.* Ella 3rd of Stepford 25723 *by* Jovial of Blackcombe 11716.

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[1] Silver Challenge Cup, value £25, given through the English Aberdeen-Angus Cattle Association for the most points awarded in a combination of entries in Classes 142 to 147, on the basis of: Four points for a First Prize, three points for a Second Prize, two points for a Third Prize, one point for a Reserve, two points for a Championship, and one point for a Reserve for a Championship.

[2] Prizes given by the Dun and Belted Galloway Cattle Breeders' Association.

Class 153.—*Galloway Cows or Heifers (in-milk), born on or before November* 30, 1922.

1155 I. (£15.)—Robert Graham, Chapel of Logan, Half Morton, Canonbie, for **May Queen of Logan** 28083, born Feb. 27, 1921, calved Jan. 20, 1925 ; *s.* Quibbler 14051, *d.* May Queen 3rd of Blackcombe 23392 *by* Macdougall 3rd of Askland 9229.

1154 II. (£10.)—Sir Robert W. Buchanan-Jardine, Bart., Castle Milk, Lockerbie, for **Dahlia 2nd of Castle Milk** 27616, born Feb. 5, 1920, calved Dec. 8, 1924 ; *s.* Norroy 2nd of Castle Milk 11777, *d.* Dahlia of Castle Milk 22948 *by* Baron 10033.

1157 III. (£5.)—John Scott, Drumhumphry, by Dalbeattie, for **Drumhumphry Cowslip 32nd** 28275, born Feb. 15, 1921, calved Jan. 20, 1925 ; *s.* Cashier of Tarbreoch 13429, *d.* Cowslip 29th of Drumhumphry 25594 *by* Hopewell of Morrington 11933.

1156 R. N.—Robert Jardine Paterson, Balgray Home Farm, Lockerbie, for **Joan 6th of Scroggiehall.**

Class 154.—*Galloway Heifers, born on or between December* 1, 1922, *and November* 30, 1923.

1161 I. (£15.)—Lady Dorothy Henley, Askerton Castle, Brampton, Cumberland, for **Zellah of Askerton** 29116, born Jan. 14, 1923 ; *s.* Punch of Dalwyne 13727, *d.* Florizelle of Craigneston 23637 *by* Cuthbert 2nd 11696.

1162 II. (£10.)—D. and J. Little, Whitehill, Corrie, Lockerbie, for **Grand Dora 4th** 29175, born May 16, 1923 ; *s.* War Bond 2nd of Corriehalls 14837, *d.* Grand Lady 2nd 22989 *by* Mascot 10830.

1163 III. (£5.)—Robert Jardine Paterson, Balgray Home Farm, Lockerbie, for **Queen of Stepford** 28952, born April 5, 1923, bred by David Brown, Stepford, Dumfries ; *s.* Yardstick of Auchengassel 14774, *d.* Esmee 4th of Stepford 23256 *by* Norroy of Castle Milk 11384.

1160 R. N.—Lady Dorothy Henley, for **Annie 10th of Askerton.**

Class 155.—*Galloway Heifers, born on or between December* 1, 1923, *and November* 30, 1924.[1]

1166 I. (£15.)—Robert Graham, Chapel of Logan, Half Morton, Canonbie, for **Logan Lady 14th** 29713, born March 1, 1924 ; *s.* Horace of Killearn 14429, *d.* Logan Lady 6th 26460 *by* Owen of Barlae 12498.

1168 II. (£10.)—John Scott, Drumhumphry, by Dalbeattie, for **Drumhumphry Charm** 29952, born March 3, 1924 ; *s.* Barlae Renown 14866, *d.* Drumhumphry Gertie 4th 27188 *by* Cashier of Tarbreoch 13429.

1167 III. (£5.)—D. and J. Little, Whitehill, Corrie, Lockerbie, for **Nettie 15th of Whitehill** 29812, born Feb. 25, 1924 ; *s.* Inverness Heir 15033, *d.* Nettie 3rd 22987 of Corriehalls *by* Matthew Mark 10726.

1165 R. N.—Sir Robert W. Buchanan-Jardine, Bart., Castle Milk, Lockerbie, for **Dorris 3rd of Castle Milk.**

Park Cattle.

Class 156.—*Park Polled or Horned Bulls, born in or before* 1924.

1169 I. (£15.)—The Duke of Bedford, K.G., Woburn Abbey, Woburn, Bletchley, for **Woburn Matthias 2nd**, born April 26, 1923 ; *s.* Faygate Matthias 71, *d.* Woburn Buckingham 11th 490 *by* Woburn Perfection 33.

1176 II. (£10.)—John H. Silley, Theydon Grove, Epping, for **Woburn Matthias 1**, born April 5, 1923, bred by the Duke of Bedford, K.G., Woburn Abbey ; *s.* Faygate Matthias 71, *d.* Woburn Buckingham 13th 492.

1175 III. (£5.)—Mrs. Lancaster, Home Farm, Kelmarsh, Northampton, for **St. Osyth Bard**, born Dec. 15, 1923, bred by Brig.-Gen. K. Kincaid-Smith, St. Osyth's Priory, Clacton-on-Sea ; *s.* Rex 133, *d.* Fichen 578 *by* Northrepp Woodwick 55.

1172 R. N.—Henry J. Cator, Ranworth Hall, Norwich, for **Ranworth Regal.**

H. C.—1170.

Class 157.—*Park Polled or Horned Cows or Heifers (in-milk), born in or before* 1922.

1184 I. (£15.)—Major Q. E. Gurney, Bawdeswell Hall, Norfolk, for **Bawdeswell Sportive** 746, born Feb. 28, 1921, calved Jan. 15, 1925, bred by Mrs. R. Gurney, Northrepps Hall, Norwich ; *s.* Bawdeswell Briton 41, *d.* Northrepps Spot 284.

1181 II. (£10.)—Lord Dynevor, Dynevor Castle, Llandilo, Carmarthenshire, for **Dynevor Evelyn** 410, born July 12, 1919, calved April 8, 1925 ; *s.* Dynevor David 5, *d.* Dynevor Nest 50 *by* Borderer.

1180 III. (£5.)—John Cator, Woodbastwick Hall, Norwich, for **Woodbastwick Black Gown** 802, born March 27, 1922, calved Jan. 31, 1925 ; *s.* Bawdeswell Plevna 43, *d.* Woodbastwick Blackmail 2nd 352 *by* Woodbastwick Stokesby 2nd.

1186 IV. (£4.)—Brig.-Gen. K. Kincaid-Smith, St. Osyth's Priory, Clacton-on-Sea, for **Jasper 3rd** 610, born April 11, 1919, calved May 16, 1925, bred by John Cator, Woodbastwick Hall, Norwich ; *s.* Woodbastwick Cumberland 2nd 63, *d.* Woodbastwick Jasper 370.

1178 V. (£3.)—The Duke of Bedford, K.G., Woburn Abbey, for **Woburn Buckingham 15th** 706, born March 24, 1921, calved March 24, 1925 ; *s.* Woburn Perfection 33, *d.* Woburn Buckingham 3rd 158 *by* No. 1 Chartley Bull.

1188 R. N.—J. C. Tabor, Giffords Hall, Stoke-by-Nayland, Suffolk, for **Pegtop 5th.**

H. C.—1177, 1182. C.—1185.

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[1] Prizes given by the Galloway Cattle Society.

Dairy Shorthorns.

Class 158.—*Dairy Shorthorn Bulls, born in or before* 1922.

1190 I. (£15, & Champion.[1])—The Earl of Bessborough, Bessborough, Piltown, Co. Kilkenny, for **Bessborough Polonius** 140959, roan, born Nov. 10, 1917; *s.* Bessborough Nestor 135121, *d.* Bessborough Blonde 15th *by* Keir Goldfinder 99249.

1192 II. (£10, & R. N. for Champion.[1])—Fred T. Fisher, Lee Farm, Pinkneys Green, Maidenhead, for **Kelmscott Imperialist 71st** 182006, light roan, born May 13, 1922, bred by R. W. Hobbs and Sons, Kelmscott, Lechlade; *s.* Creme de Menthe 119683, *d.* Primula 121st *by* Royal Hampton 11th 96908.

1191 III. (£5.)—Mark Fenwick, Abbotswood, Stow-on-the-Wold, for **Foxhill Royal Pearl** 180901, roan, born May 25, 1922, bred by Captain the Rt. Hon. E. A. FitzRoy, M.P., Foxhill, West Haddon, Rugby; *s.* Foxhill Prince Pearl 163350, *d.* Royal Charlotte 3rd *by* Raleigh 144713.

1194 IV. (£4.)—Captain the Rt. Hon. E. A. FitzRoy, M.P., Fox Hill, West Haddon, Rugby, for **Foxhill Caryl** 171702, roan, born Sept. 22, 1921; *s.* John Wild Eyes 149616, *d.* Clifford Lady Carl *by* Knight 131802.

1199 V. (£3.)—Lieut.-Col. W. M. Pryor, D.S.O., Lannock Manor, Weston, Stevenage, Herts, for **Lannock Hero** 173240, red and little white, born May 2, 1921; *s.* Crème de Menthe 119683, *d.* Betty 24th *by* Cranford Regulator 119677.

1196 R. N.—F. H. Healing, Chapel Farm, Walton Cardiff, Tewkesbury, for **Lock Dairyman.**

H. C.—1189, 1193, 1203. **C.**—1195, 1198.

Class 159.—*Dairy Shorthorn Bulls, born in* 1923.

1229 I. (£15.)—J. M. Strickland, Bainesse, Catterick, for **Bainesse Lord Broadhooks 6th** 186866, white, born July 11; *s.* Bainesse Lord Ramsden 168660, *d.* Brandsby's Lady Broadhooks 5th *by* Broadhooks Star 129947.

1211 II. (£10.)—Viscount Feilding, Newnham Paddox, Rugby, for **Foxhill Telluria Boy** 189839, white, born Aug. 19, bred by Captain the Rt. Hon. E. A. FitzRoy, M.P., Fox Hill, West Haddon; *s.* Foxhill Caryl 171702, *d.* Orsett Telluria 2nd *by* Beaconsfield Laburnham 114234.

1223 III. (£5.)—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Buckswood Fusilier** 187950, roan, born May 20, bred by Miss N. Marsland, Charlwood Park, Surrey; *s.* Histon Baron Lee 164070, *d.* 972 Miss Foggathorpe 12th *by* Barrington Chief 134987.

1232 IV. (£4.)—Robert N. Tory, Anderson, Blandford, for **Anderson Champion Bates** 186667, dark roan, born Oct. 30; *s.* Kelmscott Conjuror 3rd 137269, *d.* Damory Kirklevington 5th *by* Prince of Pearls 103408.

1216 V. (£3.)—Major R. F. Fuller, Great Chalfield, Melksham, Wilts, for **Chalfield Strawberry's Nottingham** 188328, roan, born June 5; *s.* Grendon Greenleaf Nottingham 163775, *d.* Chalfield Strawberry *by* Baron Lee 21st 118840.

1226 R. N.—Eustace Abel Smith, Longhills, Lincoln, for **Sorbrook Summertime.**

1230, 1379, 1417 R. N. for Cup.[2]—F. H. Thornton, Kingsthorpe Hall, Northampton, for **Grendon Blanco, Kingsthorpe Fairy Duchess 2nd** and **Kingsthorpe Rose Grey.**

H. C.—1209, 1210, 1222, 1228, 1230. **C.**—1213, 1221, 1234, 1236.

Class 160.—*Dairy Shorthorn Bulls, born on or between January* 1 *and March* 31, 1924.

1254 I. (£15.)—F. W. Morley, Biddestone Manor, Chippenham, for **Biddestone Pirate,** roan, born Jan. 19; *s.* Preshute Bandit 151128, *d.* Cockerham Purity (Vol. 61, p. 933) *by* Spency Beau 117836.

1256 II. (£10.)—J. M. Strickland, Bainesse, Catterick, for **Bainesse Lord Broadhooks,** red, born Jan. 9; *s.* Bainesse Royal Primrose 3rd 177983, *d.* Brandsby's Lady Broadhooks 6th (Vol. 65, p. 1130) *by* Welcome Guest 140083.

1241 III. (£5.)—A. Broome & Sons, Preston Brook, Warrington, for **Kingsthorpe Raspberry Duke,** light roan, born Feb. 23, bred by F. H. Thornton, Kingsthorpe Hall, Northampton; *s.* Kingsthorpe Fairy Duke 164556, *d.* Kingsthorpe Raspberry 4th (Vol. 64, p. 332) *by* Somerford Pilot 128276.

1247 IV. (£4.)—A Ross Fielding, The Leasowes, Hilderstone, Stone, Staffs, for **Recorder,** dark roan, born Jan. 1, bred by Christopher Dobson, Low Sizergh, Helsington, Kendal; *s.* Merryman's Recorder 183103, *d.* Snowball (Vol. 64, p. 1023) *by* Carbon 114597.

1249 V. (£3.)—Major R. F. Fuller, Great Chalfield, Melksham, Wilts, for **Wicklesham Lord Nottingham,** roan, born Feb. 27, bred by Captain T. Allen-Stevens, Wicklesham Lodge, Faringdon, Berks; *s.* Thornby Pioneer 133922, *d.* Nottingham Heiress (Vol. 64, p. 1075) *by* Heirloom 120692.

1250 R. N.—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade, for **Kelmscott Conjuror 88th**

1250, 1321, 1368 Cup.[2]—R. W. Hobbs & Sons, Ltd., for **Kelmscott Conjuror 88th, Orange 52nd** and **Melody 47th.**

H. C.—1245, 1252. **C.**—1239, 1242.

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[1] Champion Prize of £10 given by the Dairy Shorthorn Association, for the best Bull in Classes 158 to 162.

[2] Silver Challenge Cup, value 100 Guineas, given through the Dairy Shorthorn Association, for the best group of one Bull and two Cows or Heifers in Classes 158 to 166. Two at least of the animals must have been bred by the Exhibitor.

Class 161.—*Dairy Shorthorn Bulls, born on or between April* 1 *and June* 30, 1924.[1]

1266 **I. (£15.)**—Viscount Feilding, Newnham Paddox, Rugby, for **Streetaston Gold Prince 2nd**, roan, born May 24; *s.* Colescombe Graceful Lad 154898, *d.* Rose of Gold (Vol. 62, p. 1915) *by* Cloth of Gold 119511.

1279 **II. (£10.)**—Alfred Palmer, Wokefield Park, Mortimer, Berks, for **Wokefield Custodian**, roan, born May 27; *s.* Kelmscott Conjuror 60th 181980, *d.* 28406 Wokefield Charmer *by* Wokefield Rex 153117.

1271 **III. (£5.)**—R. Hollington, Chequers Mead, Potters Bar, for **Lock Prince 4th**, white, born June 26, bred by Ellice Ezra, Lock, Partridge Green, Sussex; *s.* Proud Victor 151279, *d.* Bessborough Fondness 17th (Vol. 64, p. 723) *by* Kilshane Crown Prince 120977.

1285 **IV. (£4.)**—Thomas Warburton, Hall Lane Farm, Daresbury, Warrington, for **Beauty's Proud Dairyman**, dark roan, born April 3, bred by W. Carr, Hall Hill Farm, Dalston; *s.* Carleton Dairy King 141439, *d.* Beauty 37th (Vol. 65, p. 880) *by* Admiral 134537.

1259 **V. (£3.)**—George Bickford, Somerford Grange, Brewood, Staffs, for **Aikton Butterman**, red, born April 2, bred by Mrs. Bragg, Aikton, Wigton; *s.* Leam Sabre 164757, *d.* Aikton Butterfly (Vol. 64, p. 743) *by* Lord Abbotsford 2nd 132002.

1275 **R. N.**—Kingsclere Farms, Kingsclere, Newbury, for **Kingsclere Dolphinlee Augustin.**

H. C.—1260, 1267, 1270, 1273, 1287. **C.**—1262, 1272, 1276, 1277, 1281.

Class 162.—*Dairy Shorthorn Bulls, born on or between July* 1 *and December* 31, 1924.

1290 **I. (£15.)**—Albert Charles Brown, The Gables, Fernhill Heath, Worcester, for **Rushcourt Dolphin 12th**, red roan, born Aug. 14, bred by Major R. W. Cooper, Rush Court, Wallingford; *s.* Colescombe Dolphin 2nd 170434, *d.* Rainford Countess Fawsley (Vol. 64, p. 1195) *by* Cressida's Gift 119685.

1289 **II. (£10.)**—Captain Robert B. Brassey, Cottesbrooke Hall, Northampton, for **Cottesbrooke Waterbury**, roan, born July 7; *s.* Foxhill New Year 180898, *d.* 10643 Cottesbrooke Lady Waterloo 2nd *by* Barrington Duke 129506.

1301 **III. (£5.)**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Aldenham Lord Ringlet**, red, born July 24; *s.* Aldenham Lord Barrington 177697, *d.* Hadnock Ringlet 44th (Vol. 62, p. 1017) *by* Mister Dooley 112572.

1302 **IV. (£4.)**—Lieut.-Colonel R. Mostyn-Owen, D.S.O., Woodhouse, Oswestry, for **Rednal Dandy**, roan, born Nov. 7; *s.* Lingbird 164839, *d.* 2312 Sweet Barbara 11th *by* Selsmire Dandy 145349.

1308 **V. (£3.)**—J. M. Strickland, Bainesse, Catterick, for **Bainesse Dairyman 9th**, dark roan, born July 14; *s.* Bainesse Lavender King 177975, *d.* 19096 Keyingham Tulip 6th *by* Grandee 115670.

1303 **R. N.**—Alfred Palmer, Wokefield Park, Mortimer, Berks, for **Wokefield Oswald.**

H. C.—1294, 1304, 1309. **C.**—1288, 1292, 1310.

Class 163.—*Dairy Shorthorn Cows (in-milk), born in or before* 1918.[2]

1323 **I. (£15, & Champion.[3])**—T. L. Martin, Ashe Warren House, Overton, Hants, for 6461 **Princess Gwynne**, white, born April 28, 1918, calved June 3, 1925, bred by I. J. and R. Park, Robinson House, Calthwaite, Carlisle; *s.* Moresby Victory 138107, *d.* Gwynne of Brackenburgh *by* Duke of Cumberland 115762.

1321 **II. (£10.)**—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade, for **Orange 52nd** (Vol. 64, p. 993), dark roan, born Oct. 25, 1917, calved May 7, 1925; *s.* Crème de Menthe 119683, *d.* Orange 49th *by* Sir Rafe 12th 107084.

1313 **III. (£5.)**—Viscount Feilding, Newnham Paddox, Rugby, for **Watercrook Cowslip** (Vol. 63, p. 1016), white, born Dec. 1, 1916, calved May 20, 1925, bred by J. Moffat, Spital, Kendal; *s.* Proud Prince 127480, *d.* Cowslip 12th *by* Prince Gongora 81909.

1329 **IV. (£4.)**—Lieut.-Colonel R. Mostyn-Owen, D.S.O., Woodhouse, Oswestry, for **Dairymaid 3rd** (Vol. 61, p. 784), roan, born April 4, 1914, calved June 8, 1925, bred by W. Haugh, Walby Farm, Carlisle; *s.* Bradford Prince 111123, *d.* Milkmaid *by* Ireby Signet 95549.

1327 **V. (£3.)**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Kirklevington Lady 2nd** (Vol. 64, p. 1228), roan, born April 12, 1917, calved April 30, 1925, bred by R. Long, Stondon, Beds; *s.* Barrister 2nd 129524, *d.* Kirklevington Lady *by* Pastures General 116889.

1338 **R. N.**—Captain Arnold S. Wills, Thornby Hall, Northampton, for **Thornby Foggathorpe 2nd.**

1323, 1353, 1406 **Cup.[4]**—T. L. Martin, for **Princess Gwynne, Stondon Premier Beauty** and **Sudborough Butterfly 2nd.**

1338, 1339, 1383 **R. N. for Cup.[4]**—Captain Arnold S. Wills, for **Thornby Foggathorpe 2nd, 7th** and **12th.**

H. C.—1317, 1336, 1339. **C.**—1324, 1325.

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[1] Prizes, except Fourth and Fifth, given by the Dairy Shorthorn Association.

[2] Prizes, except Fourth and Fifth, given by the Shorthorn Society.

[3] Champion Prize of £10 given by the Shorthorn Society, for the best Cow or Heifer in Classes 163 to 166. A Silver Medal is given by the Shorthorn Society to the Breeder of the Champion Dairy Shorthorn Cow.

[4] Silver Challenge Cup, value Fifty Guineas, given through the Dairy Shorthorn Association, for the best group of three Cows or Heifers in Classes 163 to 166.

Class 164.—*Dairy Shorthorn Cows (in-milk), born in* 1919 *or* 1920

1353 **I. (£15, & R. N. for Champion.[1])**—T. L. Martin, Ashe Warren House, Overton, Hants, for 26787 **Stondon Premier Beauty,** roan, born Aug. 22, 1920, calved May 15, 1925, bred by R. Long, Upper Stondon, Shefford; *s.* Chaulden Premier 147854, *d.* Stondon Beauty 2nd *by* Cardinal's Robe 119339.

1360 **II. (£10.)**—Major S. P. Yates, Broughton Grange, Banbury, for 20122 **Sorbrook Foggathorpe,** red and little white, born May 15, 1920, calved May 28, 1925; *s.* Preshute Barrington 144502, *d.* Loobagh Foggathorpe 5th *by* Loobagh Duke 126555.

1343 **III. (£5.)**—H. A. Brown, Croft House, Grendon, Atherstone, for 10738 **Grendon Cress,** roan, born May 4, 1920, calved May 2, 1925; *s.* Lord Nottingham 116317, *d.* Cressida 42nd *by* Dairy Ingram 105184.

1355 **IV. (£4.)**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for 18128 **Longhills Belle 2nd,** red and little white, born Jan. 13, 1920, calved June 1, 1925, bred by E. A. Smith, Longhills, Lincoln; *s.* Oxford Bridegroom 121914, *d.* Longhills Belle *by* Duke of Darlington 115163.

1342 **V. (£3.)**—Captain Robert B. Brassey, Cottesbrooke Hall, Northampton, for 936 **Foggathorpe,** red, born July 6, 1919, calved May 18, 1925; *s.* Wildrex 146383, *d.* Leazow Foggathorpe 4th *by* Preshute Bates 127356.

1348 **R. N.**—Mrs. E. M. Fitz-Hugh, Plas Power, Wrexham, for **Rosette Prim 4th.**

H. C.—1345, 1349. **C.**—1344, 1358.

Class 165.—*Dairy Shorthorn Cows (in-milk), born in* 1921.

1382 **I. (£15.)**—The Duke of Westminster, G.C.V.O., D.S.O., Eaton Hall, Chester, for 31623 **Eaton Belle,** roan, born March 22, calved May 3, 1925; *s.* Kenilworth True Boy 143246, *d.* Queen of France *by* Beau Furbelow 94254.

1375 **II. (£10.)**—H. P. Mortimer, Kingsley Windmill, Warrington, for 25937 **Princess Benedict 17th,** light roan, born July 28, calved June 6, 1925, bred by H. R. Ion, Downley Rigg, Westlinton, Carlisle; *s.* Searchlight 159242, *d.* Princess Benedict 14th *by* Oxford Duke of Calthwaite 61st 127221.

1372 **III. (£5.)**—Maurice and Ashton, Manton Grange, Marlborough and Scotsgrove, Thame, for 27468 **Preshute Honey 3rd,** red, born Jan. 30, calved March 25, 1925, bred by C. J. K. Maurice, Manton Grange; *s.* Tockenham Keystone 10th 152613, *d.* Preshute Honey *by* Roan Duke 122449.

1368 **IV. (£4.)**—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade, for 25441 **Melody 47th,** roan, born May 3, calved May 1, 1925; *s.* Crême-de-Menthe 119683, *d.* Melody 33rd *by* Kelmscott Acrobat 4th 126217.

1379 **V. (£3.)**—F. H. Thornton, Kingsthorpe Hall, Northampton, for 30950 **Kingsthorpe Fairy Duchess 2nd,** red, born Oct. 26, calved May 26, 1925; *s.* Playford Wilful Lord 158331, *d.* Fairy Duchess 18th *by* Lord Crankley 2nd 112334.

1383 **R. N.**—Captain Arnold S. Wills, Thornby Hall, Northampton, for **Thornby Foggathorpe 12th.**

H. C.—1361, 1376, 1380. **C.**—1363.

Class 166.—*Dairy Shorthorn Heifers (in-milk), born in or after* 1922.

1393 **I. (£15.)**—W. Haynes, Bletchington, Oxon, for 41063 **Holmelacy Daisy 9th,** roan, born Aug. 15, 1922, calved May 27, 1925, bred by M. Perkins, Holme Lacy, Hereford; *s.* Lucky Man 157456, *d.* Lacy Daisy 8th *by* Rainford Czar 117183.

1417 **II. (£10.)**—F. H. Thornton, Kingsthorpe Hall, Northampton, for 43405 **Kingsthorpe Rose Grey,** red and little white, born March 25, 1922, calved June 19, 1925; *s.* Kingsthorpe Fairy Duke 164556, *d.* Rose Grey 5th *by* Underley Hero 32nd 134035.

1406 **III. (£5.)**—T. L. Martin, Ashe Warren House, Overton, Hants, for 38337 **Sudborough Butterfly 2nd,** roan, born May 6, 1922, calved April 20, 1925, bred by J. Jackson, Thrapston; *s.* Hethersett Dairyman 131453, *d.* Kingsthorpe Butterfly 15th *by* Somerford Pilot 128276.

1391 **IV. (£4.)**—G. P. Golden, Eaglesfield, Leire, Rugby, for 49141 **Lady Clovelly,** red roan, born May 18, 1923, calved June 18, 1925; *s.* Lord Leicester 9th 164968, *d.* Lady Ivanhoe *by* Gilmorton Lad 131183.

1392 **V. (£3.)**—G. P. Golden, for 36760 **Lady Doreen 9th,** red and little white, born Oct. 22, 1922, calved April 25, 1925; *s.* Lord Leicester 9th 164968, *d.* Lady Doreen *by* Gilmorton Lad 131183.

1409 **R. N.**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Hastoe Barrington 9th.**

H. C.—1384, 1385, 1389, 1390, 1416. **C.**—1394, 1400, 1408, 1410.

Non-Pedigree Dairy Shorthorns.

Class 167.—*Non-Pedigree Dairy Shorthorn Cows (in-milk), born in or before* 1919.

1422 **I. (£15.)**—H. A. Brown, Croft House, Grendon, Atherstone, for **Isabelle** 15164, roan, born Feb. 18, 1918, calved June 11, 1925; *s.* Barrington Snowstorm 2nd 124184, *d. by* Festive Prince 120229.

1423 **II. (£10.)**—H. P. Mortimer, Kingsley Windmill, Warrington, for **Lady Graceful,** roan, breeder and age unknown, calved June 21, 1925.

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[1] Champion Prize of £10 given by the Shorthorn Society, for the best Cow or Heifer in Classes 163 to 166. A Silver Medal is given by the Shorthorn Society to the Breeder of the Champion Dairy Shorthorn Cow.

Class 168.—*Non-Pedigree Dairy Shorthorn Cows or Heifers (in-milk), born in or after* 1920.[1]

1424 I. (£15.)—H. A. Brown, Croft House, Grendon, Atherstone, for **Peggy**, red and white, born May 19, 1921, calved March 11, 1925; *s.* Combebank Nottingham 130310, *d.* Isabelle 15164 *by* Barrington Snowstorm 2nd 124184.

Lincolnshire Red Shorthorns.

Class 169.—*Lincolnshire Red Shorthorn Bulls, born in or before* 1922.

1428 **I. (£15, & Champion.[2])**—Butler Smith, The Fields, Cropwell Butler, Nottingham, for **Harlaxton Balancer** 17603, born April 4, 1921, bred by W. A. Harrison, North Lodge, Harlaxton; *s.* Horkstownian Premier 14605, *d.* Harlaxton Deeping Pride *by* Deeping Curly Coat 2nd 10639.

1426 **II. (£10, & R. N. for Champion.[2])**—Rowland F. Aubrey, Weybridge, Ellington, Huntingdon, for **Kirmington Weybridge** 18674, born March 22, 1921, bred by George Marris, Kirmington, Ulceby, Lincs; *s.* Hallington Ascent 15487, *d.* Pendley Yarborough Ruby 2nd *by* Saltfleet Marshman 4958.

1427 **III. (£5.)**—Robert Moss, Hallgates, Cropston, Leicester, for **Soignee Fashion** 14879, born Dec. 22, 1918, bred by A. Lewis, Westacre, Norfolk; *s.* Elkington Hercules 3rd 13432, *d.* Soignee.

1430 **R. N.**—Topper Brothers, Broughton Lodge, Broughton, Hunts, for **Deepden Reality 14th.**

Class 170.—*Lincolnshire Red Shorthorn Bulls, born in* 1923.

1431 **I. (£15.)**—John Evens & Son, Burton, Lincoln, for **Tathwell Diophon** 19868, born Feb. 21, bred by H. and A. D. Botterill, Tathwell Hall, Louth; *s.* Harlaxton V.C. 14573, *d.* Tathwell Milker *by* Utterby Yeoman 12102.

1433 **II. (£10.)**—Butler Smith, The Fields, Cropwell Butler, Nottingham, for **Cropwell Victor** 19294, born April 21; *s.* Tealby No. 304 18082, *d.* Sudbrook 195C *by* Bonby Seaman 10497.

Class 171.—*Lincolnshire Red Shorthorn Bulls, born in* 1924.

1437 **I. (£15.)**—Butler Smith, The Fields, Cropwell Butler, Nottingham, for **Cropwell Premier** 19292, born Jan. 12; *s.* Harlaxton Balancer 17603, *d.* Bingham Violet (Vol. 27, p. 535) *by* Anderby Clipper 13138.

1436 **II. (£10.)**—Butler Smith, for **Cropwell Balancer** 19291, born Jan. 9; *s.* Harlaxton Balancer 17603, *d.* Cropwell Lady (Vol. 27, p. 704) *by* Flawborough Marquis 15444.

1434 **III. (£5.)**—H. G. Clarke, Forest View, Hinckley, for **Forest Andy**, born April 12; *s.* Foston Arab 16420, *d.* Wykin Tourist 13th (Vol. 24, p. 364) *by* Bonby Tourist 9647.

Class 172.—*Lincolnshire Red Shorthorn Cows or Heifers (in-milk), born in or before* 1922.

1438 **I. (£15.)**—John Evens & Son, Burton, Lincoln, for **Burton Opal 2nd**, born in March, 1920, calved May 28, 1925, bred by W. Warburton, Sturton, Retford; *s.* Threckingham Kingmaker 14018, *d.* Opal *by* Harlaxton Judgment 10751.

1440 **II. (£10.)**—Butler Smith, The Fields, Cropwell Butler, Nottingham, for **Cropwell Lady** (Vol. 27, p. 704), born Feb. 24, 1921, calved Feb. 15, 1925; *s.* Flawborough Marquis 15444, *d.* Flawborough Lady *by* Croxton Ruby 50th 9803.

1442 **III. (£5.)**—Butler Smith, for **Saltfleet Red Rose** (Vol. 27, p. 508), born July 28, 1919, calved May 2, 1925, bred by T. H. B. Freshney, Worlaby, Brigg; *s.* Cockerington Hallington 2nd 11437, *d. by* Croxton Ruby 50th 9803.

1439 **R. N.**—A. Preston Jones, Mickleover House, Derby, for **Mickleover Prima Donna.**

Class 173.—*Lincolnshire Red Shorthorn Cows or Heifers (in-milk), born in or before* 1922, *showing the best milking properties.*[3]

1448 **I. (£15, & Champion.[4])**—John Evens & Son, Burton, Lincoln, for **Burton Cherry 4th** (Vol. 26, p. 331), born Sept. 23, 1917, calved June 15, 1925; *s.* Burton Jordan 11397, *d.* Burton Cherry 3rd *by* Burton Futnetby 9694.

1449 **II. (£10, & R. N. for Champion.[4])**—John Evens & Son, for **Burton Fillpail 6th** (Vol. 29, p. 344), born in March, 1918, calved June 18, 1925, bred by Captain W. G. Need, Winthorpe Hall, Newark; *s.* Burton Jordan 11397, *d* Burton Fillpail 2nd *by* Mr. Profit 4926.

1446 **III. (£5.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Scothern Pansy** (Vol. 26, p. 304), born April 27, 1919, calved May 3, 1925, bred by Benjamin G. Bowser, Scothern Manor, Lincoln; *s.* William of Hallington 10362, *d. by* Scampton King Hal 7119.

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[1] Prizes given by the Dairy Shorthorn Association.

[2] Champion Silver Cup, value £10, given by the Lincolnshire Red Shorthorn Association for the best Bull.

[3] Prizes, except Fourth, given by the Lincolnshire Red Shorthorn Association.

[4] Champion Silver Cup, value £10, given by the Lincolnshire Red Shorthorn Association for the best Female of the Dairy type.

1445 **IV. (£4.)**—BENJAMIN GEORGE BOWSER, Scothern Manor, Lincoln, for **Scothern Sunset** (Vol. 26, p. 308), born April 28, 1918, calved May 31, 1925; *s.* Scampton Quorum 11926, *d. by* Scampton King 7116.

1452 **R. N.**—LIEUT.-COLONEL SIR A. G. WEIGALL, K.C.M.G., Petwood, Woodhall Spa, for **Langford Polly 5th.**

Class 174.—*Lincolnshire Red Shorthorn Heifers, born in* 1923.

1462 **I. (£15, & Champion.[1])**—MISSES E. M. and S. M. GRANTHAM, The Rookery, West Keal, Spilsby, for **Keal Kit 12th** (Vol. 30, p. 385), born April 29; *s.* Anwick Perfection 17241, *d.* Keal Kit 4th *by* Kent Rollo 6925.

1466 **II. (£10.)**—BUTLER SMITH, The Fields, Cropwell Butler, Nottingham, for **Cropwell Kirmington** (Vol. 29, p. 497), born Feb. 28; *s.* Poolham Nebo 17878, *d.* Kirmingham Rose 60th *by* Scampton King of the Rubies 7122.

1453 **III. (£5.)**—HIS MAJESTY THE KING, Sandringham, for **Wolferton Treasure 2nd** (Vol. 30, p. 251), born March 23; *s.* Wolferton Prince 15059, *d.* Pendley Treasure *by* Croxton Ruby 33rd 8939.

1459 **IV. (£4.)**—C. DE PARAVICINI, Birkholme Manor, Corby, Lincs, for **Beacon Hill Fatima** (Vol. 29, p. 448), born Jan. 7; *s.* Beacon Hill Dago 16802, *d.* Beacon Hill Fanny *by* Bloxholme Sambo 10493.

1461 **V. (£3.)**—WILLIAM GRANT, Skinnand, Navenby, Lincoln, for **Skinnand Columbine 3rd** (Vol. 30, p. 381), born Jan. 3; *s.* Skinnand Quality 15830, *d.* Skinnand Columbine *by* Kirmington Excursionist 4th 10829.

1456 **R. N.**—ROWLAND F. AUBREY, Weybridge, Ellington, Huntingdon, for **Pride of Weybridge.**
H. C.—1454, 1467. **C.**—1455, 1457.

Class 175.—*Lincolnshire Red Shorthorn Heifers, born in* 1924.

1469 **I. (£15, & R. N. for Champion.[1])**—JOHN W. BELL, Poolham Hall, Horncastle, for **Poolham Lilac**, born April 16; *s.* Kirmington Ruby King 35th 15585, *d.* Poolham Cowslip (Vol. 27, p. 358) *by* Pendley Lad 9247.

1472 **II. (£10.)**—WILLIAM GRANT, Skinnand, Navenby, Lincoln, for **Skinnand Columbine 4th**, born Feb. 25; *s.* Skinnand Quality 15830, *d.* Skinnand Columbine (Vol. 27, p. 523) *by* Kirmington Excursionist 10829.

1471 **III. (£5.)**—C. DE PARAVICINI, Birkholme Manor, Corby, Lincs, for **Kingwood Ruby**, born May 9, bred by Capt. P. L. Ransom, Kingwood, Lambourne; *s.* Anderby Red Pole 15112, *d.* Pendley Duchess 3rd (Vol. 25, p. 40) *by* Scampton King of the Rubies 7122.

1468 **R. N.**—HIS MAJESTY THE KING, Sandringham, for **Wolferton Music.**
H. C.—1475. **C.**—1473.

Devons.

Class 176.—*Devon Bulls, born in or before* 1923.

1477 **I. (£15, and Champion.[2])**—ABRAHAM TRIBLE & SONS, Halsdon Barton, Holsworthy, North Devon, for **Overton Goldcoin 2nd** 10236, born May 1, 1918, bred by the late W. Huxtable, Bishop's Tawton, Barnstaple; *s.* Capton Butterman 9816, *d.* Overton Myrtle 2nd 25912 *by* Stockleigh Masterpiece 6548.

1478 **II. (£10.)**—FRED W. VERNEY, Avercombe, Bishopsnympton, Barnstaple, for **Molland Wonder** 12362, born July 12, 1923, bred by F. Cockram, Molland; *s.* Land Key Cowboy 10650, *d.* Yarnscombe Milkmaid 1st 34686 *by* Putsham Good Boy 6883.

Class 177.—*Devon Bulls, born in* 1924.

1481 **I. (£15, & R. N. for Champion.[2])**—CHARLES MORRIS, Highfield Hall, St. Albans and Bishop's Lydeard, for **Highfield Gem** 12700, born Jan. 2; *s.* Highfield Gem 2nd 9329, *d.* Northmoor Luck 28836 *by* Northmoor Monarch 7807.

1480 **II. (£10.)**—ELAND CLATWORTHY, Cutsey, Trull, Taunton, for **Cutsey Rupert** 12635, born May 30; *s.* Cutsey Larkspur 11837, *d.* Westcott Ruby 29307 *by* Longforth Mailbag 7439.

Class 178.—*Devon Cows or Heifers (in-milk), born in or before* 1922.

1482 **I. (£15, & Champion.[3])**—CHARLES MORRIS, Highfield Hall, St. Albans and Bishop's Lydeard, for **Highfield Cherry 2nd** 35224, born Jan. 30, 1922, calved Jan. 12, 1925; *s.* Highfield Gem 2nd 9329, *d.* Northmoor Cherry 31554 *by* Gotton Prince 2nd 8070.

1484 **II. (£10.)**—TOM WARNE, Trevisquite Manor, St. Mabyn, Cornwall, for **Trevisquite Favourite** 33514, born Aug. 20, 1920, calved Jan. 20, 1925; *s.* Morton Model 9754, *d.* Walson Favourite 26979 *by* Whimple Pimpernel 6579.

1483 **III. (£5.)**—CHARLES MORRIS, for **Highfield Luck** 34229, born March 1, 1921, calved March 5, 1925; *s.* Crazelowman Beechnut 9620, *d.* Northmoor Luck 28836 *by* Northmoor Monarch 7807.

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[1] Champion Silver Cup, value £10, given by the Lincolnshire Red Shorthorn Association for the best Female other than Dairy type.

[2] Champion Prize of £10 10*s.* given by the Devon Cattle Breeders' Society for the best Bull in Classes 176 and 177, entered or eligible for entry in the Devon Herd Book.

[3] Champion Prize of £10 10*s.* given by the Devon Cattle Breeders' Society for the best Cow or Heifer in Classes 178 to 181, entered or eligible for entry in the Devon Herd Book.

Class 180.—*Devon Heifers, born in* 1923.

1485 **I. (£15, & R. N. for Champion.[1])**—H.R.H. The Prince of Wales, K.G., Home Farm, Stoke Climsland, Cornwall, for **Coombeshead Cressida** 35570, born Feb. 10; *s.* Clampit Nonsuch 10924, *d.* Coombeshead Crocus 31587 *by* Clampit Gay Laddie 9197.

1486 **II. (£10.)**—Eland Clatworthy, Cutsey, Trull, Taunton, for **Cutsey Prude** 35782, born June 1; *s.* Cutsey Peer 10974, *d.* Westcott Perfection 4th 31783 *by* Crazelowman Defender 8813.

1487 **III. (£5.)**—Charles Morris, Highfield Hall, St. Albans and Bishop's Lydeard, for **Highfield Stuckey 1st** 36176, born April 6; *s.* Highfield Gem 2nd 9329, *d.* Vanguard's Stuckey 8th 29266 *by* Northmoor Vanguard 7810.

Class 181.—*Devon Heifers, born in* 1924.

1488 **I. (£15.)**—His Majesty the King, The Royal Farms, Windsor, for **Windsor Sadie** 36499, born March 7; *s.* Highfield Warrior 11917, *d.* Windsor Sunray 31585 *by* Windsor Famous 9522.

1489 **II. (£10.)**—Charles Morris, Highfield Hall, St. Albans and Bishop's Lydeard, for **Highfield Cherry 3rd** 37213, born Jan. 1; *s.* Highfield Gem 2nd 9329, *d.* Northmoor Cherry 31554 *by* Gotton Prince 2nd 8070.

1490 **III. (£5.)**—Charles Morris, for **Highfield Fairmaid 6th** 37224, born Jan. 10; *s.* Highfield Gem 2nd 9329, *d.* Highfield Fairmaid 5th 32174 *by* Bryanston Masterpiece 8783.

1491 **R. N.**—Clifford Thorne, Rutland Villa, Maindee, Newport, Mon., for **Molton Wallflower 2nd.**

South Devons.

Class 182.—*South Devon Bulls, born in or before* 1923.

1492 **I. (£15, & Champion.[2])**—Captain J. T. Coryton, Pentillie Castle, St. Mellion, Cornwall, for **Mathecombe Milkman** 7245, born Jan. 29, 1917, bred by J. M. Wroth, Coombe, Halbeton, Plymouth; *s.* Brownstone Laddie 4774, *d.* Kitty 11346 *by* Mirafield Paymaster 3491.

1496 **II. (£10, & R. N. for Champion.[2])**—W. L. Hosking & Sons, Fentongollan, Merther, Probus, Cornwall, for **Fentongollan Apollo** 8466, born Sept. 5, 1919; *s.* Palston Ruler 5548, *d.* Kitty 9352 *by* Ruby's Hero 2751.

1494 **III. (£5.)**—Samuel Every, Tinnell, Landulph, Hatt, Cornwall, for **Lixton Councillor 5th** 8590, born Jan. 24, 1919, bred by Sydney S. Horton, Lixton, Loddiswell, Devon; *s.* Councillor 12th 4828, *d.* Molly 24th 12764 *by* Norman 3510.

1493 **R. N.**—J. P. Cundy & Sons, Estover, Crownhill, Devon, for **Milkman.**
H. C.—1497.

Class 183.—*South Devon Bulls, born in* 1924.

1501 **I. (£15.)**—John Wakeham, Rowden, Newton Ferrers, Devon, for **Rowden Eustace 2nd,** born Feb. 26; *s.* Painsford Eustace 9923, *d.* Lovely 20747 *by* Napoleon 6061.

1498 **II. (£10.)**—J. P. Cundy & Sons, Estover, Crownhill, Devon, for **Estover Sir Frederick,** born June 24, bred by F. Piggers & Sons, Plymouth; *s.* Prawle Rentpayer 9388, *d.* Curly 10th 18489 *by* Creacombe Sport 5381.

1499 **III. (£5.)**—Samuel Every, Tinnell, Landulph, Hatt, Cornwall, for **Tinnell Eclipse,** born Jan. 10; *s.* Napoleon 20th 7248, *d.* Ethel 18005 *by* Offields Monarch 2nd 5543.

Class 184.—*South Devon Cows or Heifers (in-milk), born in or before* 1922.

1502 **I. (£15, & Champion.[3])**—Henry Chaffe, Harestone, Brixton, Devon, for **Worswell Gladys 11th** 21096, born July 2, 1919, calved Dec. 26, 1924; *s.* Widland Champion 6874, *d.* Worswell Gladys 4th 13663 *by* Merafield Royal Star.

1504 **II. (£10.)**—Walter Hunt, Tracey's Farm, Berry Pomeroy, Totnes, for **Milkmaid 10th** 18197, born Aug. 2, 1917, calved March 2, 1925, bred by W. S. Harris, Aish Farm, Stoke Gabriel, Totnes; *s.* Well Champion 5210, *d.* Milkmaid 5th 12696 *by* Free Trade 3438.

1503 **III. (£5.)**—Walter Hunt, for **Milkmaid 9th** 16797, born Sept. 2, 1916, calved April 13, 1925, bred by W. S. Harris, Aish Farm, Stoke Gabriel, Totnes; *s.* Well Champion 5210, *d.* Milkmaid 4th 11644 *by* Dahlia Hero 2687.

Class 185.—*South Devon Heifers, born in* 1923.

1506 **I. (£15, & R. N. for Champion.[3])**—Lord Mildmay of Flete, Flete, Ermington, Devon, for **Flete Countess 3rd** 28889, born July 2; *s.* Trehele Forester 9500, *d.* Countess 2nd 18522 *by* Lilian's Champion 6016.

1508 **II. (£10.)**—Lord Mildmay of Flete, for **Flete Rosebud** 28893, born Aug. 10; *s.* Trehele Forester 9500, *d.* Flete Rose 23516 *by* Random 7315.

1509 **III. (£5.)**—John Wakeham, Rowden, Newton Ferrers, Devon, for **Rowden Priscilla** 29405, born Feb. 5; *s.* Daisy's Pride 8417, *d.* Pansy 16152 *by* Pamflete Eclipse 4510.

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[1] Champion Prize of £10 10*s.* given by the Devon Cattle Breeders' Society for the best Cow or Heifer in Classes 178 to 181, entered or eligible for entry in the Devon Herd Book.

[2] Silver Challenge Cup, value £10 10*s.*, given by the South Devon Herd Book Society for the best Bull in Classes 182 and 183.

[3] Silver Challenge Cup, value £10 10*s.*, given by the South Devon Herd Book Society for the best Cow or Heifer in Classes 184 to 186.

Class 186.—*South Devon Heifers, born in* 1924.[1]

1514 I. (£15.)—Lord Mildmay of Flete, Flete, Ermington Devon, for **Flete Pink 3rd,** born Jan. 19; *s.* Trehele Forester 9500, *d.* Flete Pink 23515 *by* Random 7315.

1515 II. (£10.)—Lord Mildmay of Flete, for **Flete Princess,** born Jan. 1; *s.* Trehele Forester 9500, *d.* Flete Countess 25432 *by* General 7757.

1512 III. (£5.)—Samuel Every, Tinnell, Landulph, Hatt, Cornwall, for **Tinnell Eureka,** born Jan. 15; *s.* Napoleon 20th 7248, *d.* Curley 6th 13831 *by* King Lear 4426.

1510 R. N.—Henry Chaffe, Harestone, Brixton, Devon, for **Harestone Gladys 15th.**

Red Polls.

Class 187.—*Red Poll Bulls, born in or before* 1922.

1516 I. (£15, & R. N. for Champion.[2])—His Majesty the King, Sandringham, for **Royal Crimson** 11763, born Oct. 28, 1919; *s.* Sudbourne Crimson 11222, *d.* 25094 Gressenhall Rubina *by* Unique 10379.

1526 II. (£10.)—Thomas H. Sochon, Tanfield Tye, West Hanningfield, Chelmsford, for **Necton Golconda** 12757, born Jan. 19, 1922, bred by R. Harvey Mason, Necton Hall, Swaffham; *s.* Sudbourne Crœsus 10927, *d.* 22573 Godiva *by* Turk 10115.

1525 III. (£5.)—M. and J. E. Parry, Talybryn, Bwlch S.O., Breconshire, for **Usk Valley Foundation** 12469, born Sept. 17, 1921, bred by Mrs. M. Parry, Talybryn, Bwlch; *s.* Sudbourne Albion 11064, *d.* 24892 Sudbourne Robuste *by* Acton Crowfoot 9987.

1527 IV. (£4.)—Lord Wavertree, Horsley Hall, Gresford, North Wales, for **Ashmoor Jocund** 12499, born Jan. 23, 1922, bred by A. Carlyle Smith, Sutton Hall, Woodbridge; *s.* Ashmoor Pearson 11525, *d.* 23386 Ashmoor Joan *by* Dax 9567.

Class 188.—*Red Poll Bulls, born in* 1923.

1534 I. (£15, & Champion.[2])—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Ashmoor Alert,** born March 20; *s.* Davyson 363rd 11926, *d.* 25448 Ashmoor Vi *by* Emperor 10410.

1528 II. (£10.)—Lieut.-Colonel R. C. Batt, C.B.E., M.V.O., Gresham Hall, Norwich, for **Gresham Rustic,** born June 12; *s.* Basildon Royal 11882, *d.* 28800 Gresham Saucy Girl *by* Sprowston Spartacus 11482.

1535 III. (£5.)—Thomas H. Sochon, Tanfield Tye, West Hanningfield, Chelmsford, for **Red Guide** 13173, born July 12, bred by Herbert Blofield, Billingford Hall, Diss; *s.* Sudbourne Cicero 12456, *d.* 28097 Red Girl *by* Acton Loyal 10942.

1531 IV. (£4.)—Viscount Folkestone, Longford Castle, Salisbury, for **Longford Wistful** 13113, born Feb. 12; *s.* Sudbourne Choice Goods 12455, *d.* 29045 Longford Languish *by* Longford Mixture 11407.

1529 R. N.—Lieut.-Colonel C. Brook, Kinmount, Annan, Dumfriesshire, for **Kinmount Clinker.**

H. C.—1532. C.—1530.

Class 189.—*Red Poll Bulls, born in* 1924.

1545 I. (£15.)—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Kirton Sand,** born April 20, bred by W. F. Paul, Kirton Lodge, Ipswich; *s.* Sudbourne Sam 12848, *d.* 27041 Kirton Moss *by* Shotford 11200.

1540 II. (£10.)—Lieut.-Colonel Sir Merrik R. Burrell, Bart., C.B.E., Knepp Castle, Horsham, for **Knepp Insurance,** born April 2; *s.* Necton Grenadier, *d.* 27063 Knepp Prudence *by* Sudbourne Crown 10803.

1541 III. (£5.)—Mrs. R. M. Foot, White Hill, Berkhamsted, for **White Hill Marquis,** born Jan. 29; *s.* Knepp Marquis 12704, *d.* 28412 White Hill Molly *by* Sudbourne Hector 11224.

1546 IV. (£4.)—Charley Tinker, Kilmartin, Inverness, for **Kilmartin Red Coat** 13448, born Jan. 30; *s.* Crowfoots Mollyson 10843, *d.* 26867 Gressenhall Kathleen *by* Gressenhall Beresford 10174.

1539 R. N.—Thomas Brown & Son, Marham Hall, King's Lynn, for **Marham Palmerston.**

Class 190.—*Red Poll Cows or Heifers (in-milk), born in or before* 1922.

1568 I. (£15, & R. N. for Champion.[3])—Walter Scrimgeour, Wissett Hall, Halesworth, Suffolk, for 27327 **Tendring Floss 29th,** born Oct. 1, 1916, calved May 1, 1925, bred by Sir Joshua Rowley, Bart., Tendring Hall, Stoke-by-Nayland; *s.* Rendlesham Hector 10658, *d.* 22558 Floss 10th *by* Combatant 9550.

1567 II. (£10.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for 25965 **Sudbourne Comfit,** born Aug. 10, 1916, calved March 27, 1925, bred by Kenneth M. Clark, Sudbourne Hall, Orford; *s.* Sudbourne Credit 10796, *d.* 22355 Sudbourne Comfort *by* Sudbourne Spicy 9751.

1566 III. (£5.)—Major J. A. Morrison, D.S.O., for 29582 **Basildon Comfit,** born May 9, 1921, calved March 11, 1925; *s.* Sudbourne Miner 11492, *d.* 25965 Sudbourne Comfit *by* Sudbourne Credit 10796.

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[1] Prizes given by the South Devon Herd Book Society.

[2] Champion Prize of £5 given by the Red Poll Cattle Society for the best Bull in Classes 187 to 189.

[3] Champion Prize of £5 given by the Red Poll Cattle Society for the best Cow or Heifer in Classes 190 to 192.

1563 **IV. (£4.)**—Hurst Brothers, Ltd., Asheldham Chase, Southminster, Essex, for 26059 **Henham Sunshine**, born June 27, 1917, calved June 9, 1925, bred by the Earl of Stradbroke, Henham Hall, Suffolk; *s.* Redgrave Royal 10350, *d.* 22238 Pyt Viola *by* Dax 9567.

1573 **V. (£3.)**—Lord Wavertree, Horsley Hall, Gresford, North Wales, for 30252 **Necton Enid 2nd**, born Sept. 30, 1921, calved March 20, 1925, bred by R. Harvey Mason, Necton Hall, Swaffham; *s.* Sudbourne Crœsus 10927, *d.* 23005 Ena *by* Aviator 9995.

1570 **R. N.**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Ashmoor Sorceress.**

H. C.—1547, 1557. **C.**—1556, 1559.

Class 191.—*Red Poll Heifers, born in* 1923.

1594 **I. (£15, & Champion.[1])**—A. Carlyle Smith, Sutton Hall, Woodbridge, for 31996 **Ashmoor Berry**, born Jan. 1; *s.* Aspall Eros 6th 11875, *d.* 28448 Ashmoor Bertha *by* Ashmoor Pearson 11525.

1591 **II. (£10.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for 32055 **Basildon Wonder Pear**, born Jan. 23; *s.* Basildon Orpheus 11557, *d.* 28618 Colworth Wistful *by* Plumstead Periscope 11188.

1586 **III. (£5.)**—N. A. Heywood, Glevering Park, Wickham Market, for 32939 **Model Aconite 2nd**, born March 15, bred by A. B. Longe, Pettistree, Wickham Market; *s.* Combs Heroic 11912, *d.* 26271 Honingham Aconite 2nd *by* Red Petal 10908.

1596 **IV. (£4.)**—Lord Wavertree, Horsley Hall, Gresford, North Wales, for 33255 **Sudbourne Kismet**, born April 1, bred by the Exors. of the late Lord Manton, Sudbourne Hall, Orford; *s.* Saham Shrewd Boy 11455, *d.* 29366 Sudbourne Kiwi *by* Framsden Crockford 11137.

1574 **V. (£3.)**—His Majesty the King, Sandringham, for 33093 **Royal Ruth 2nd**, born May 6; *s.* Easton Autocrat 11624, *d.* 29207 Royal Rubina *by* Royal Victor 11453.

1595 **R. N.**—Thomas H. Sochon, Tanfield Tye, West Hanningfield, Chelmsford, for **Tanfield Dora.**

H. C.—1579. **C.**—1584, 1588.

Class 192.—*Red Poll Heifers, born in* 1924.

1599 **I. (£15.)**—J. P. Arkwright, Hatton House, Warwick, for **Hatton Famous**, born Feb. 14; *s.* Ashmoor Sir Richard 11872, *d.* 24035 Hatton Fable *by* Acton Hussar 9887.

1605 **II. (£10.)**—H. Munro Cautley, Neutral Farm, Butley, Tunstall S.O., Suffolk, for **Butley Fragrance**, born Jan. 26; *s.* Royal Crimson 11763, *d.* 30347 Royal Mavis *by* Royal Sunshine 11452.

1618 **III. (£5.)**—A. Carlyle Smith, Sutton Hall, Woodbridge, for **Ashmoor Peeress**, born Jan. 1; *s.* Aspall Eros 6th 11875, *d.* 22422 Ashmoor Peerless *by* Davyson 265th 9230.

1614 **IV. (£4.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Basildon Wonder Pear 2nd**, born March 15; *s.* Basildon King 12519, *d.* 28618 Colworth Wistful *by* Plumstead Periscope 11188.

1597 **V. (£3.)**—His Majesty the King, Sandringham, for **Royal Primrose**, born March 16; *s.* Easton Autocrat 11624, *d.* 25517 Christmas Rose *by* Boulge King's Bounty 10710.

1612 **R. N.**—Felix W. Leach, Meddler Stud, Kennett, Newmarket, for **Meddler Harebell.**

H. C.—1602, 1615. **C.**—1609.

Blue Albions.

Class 193.—*Blue Albion Bulls, born in or before* 1922.

1621 **I. (£15.)**—Lieut.-Colonel William Edward Harrison, O.B.E., Wychnor Park, Burton-on-Trent, for **Bank Champion 183**, born July 28, 1921, bred by G. W. Axe, Loxley, Uttoxeter; *s.* Bank Baron 1, *d.* Bank Marion 68.

1620 **II. (£10.)**—Percy Dobson, Manor Farm, Ridgwardine, Market Drayton, for **Elton Monarch 301**, born Aug. 27, 1922, bred by J. W. Dakin, Elton, Matlock; *s.* Bank Baron 1, *d.* Elton Maggie 1230 *by* Bank Chief 2.

1623 **III. (£5.)**—Randolph Tory, Charisworth Manor, Blandford, for **Charisworth Champion 259**, born July 22, 1922; *s.* Bank Scarsdale 21, *d.* Charisworth Turnworth 3338.

1622 **R. N.**—E. F. Potter & Son, Idover Demesne, Little Somerford, Chippenham, for **Stanton Earl of Derby.**

Class 194.—*Blue Albion Bulls, born in* 1923.[2]

1624 **I. (£15.)**—Thomas H. Calderbank, The Hall, Stow Mains, Chelmsford, for **Broomhill Threshold**, born March 31, bred by Major Gerald Johnson, D.S.O., Foston, Derbyshire; *s.* Mountain King 81, *d.* Broomhill Amber 1072.

1627 **II. (£10.)**—Arnold Gillett, Ridgwood, Chorley, Lancs, for **Ridgwood Blue Bank**, born Aug. 31; *s.* England's Glory 49, *d.* Ridgwood Bank.

1626 **III. (£5.)**—Percy Dobson, Manor Farm, Ridgwardine, Market Drayton, for **Ridgwardine Chief**, born Nov. 1; *s.* Hurdlow Champion 61, *d.* Ridgwardine Sweetheart 6456.

1628 **R. N.**—W. E. Glover, The Shrubberies, Snarestone, Burton-on-Trent, for **Snarestone Court.**

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[1] Champion Prize of £5 given by the Red Poll Cattle Society for the best Cow or Heifer in Classes 190 to 192.

[2] Prizes given by the Blue Albion Cattle Society.

Class 195.—*Blue Albion Bulls, born in* 1924.[1]

1630 I. (£15.)—PERCY DOBSON, Manor Farm, Ridgwardine, Market Drayton, for **Bradbourne Orion**, born April 20, bred by A. Trafford, Dulands Farm, Ashbourne; *s.* Cropper Chief 285, *d.* Bradbourne Florine 2408 *by* Bradbourne Dairyman 29.

1635 II. (£10.)—RANDOLPH TORY, Charisworth Manor, Blandford, for **Charisworth Blue Boy**, born Jan. 27; *s.* Charisworth Peter 267, *d.* Dumpling 2nd.

1632 III. (£5.)—A. T. GREENSLADE, Little Walden Park, Saffron Walden, for **Rockells Dreadnought**, born March 6, bred by Mr. Cowell, Rockells, Elmdon, Saffron Walden; *s.* Bank Scarsdale 21, *d.* Rockells Fuchsia 6536.

1634 R. N.—WILFRED L. STEEL, Ranton Abbey, Haughton, Stafford, for **Ranton Victor.**

Class 196.—*Blue Albion Cows or Heifers (in-milk), born in or before* 1922.

1647 I. (£15.)—T. H. SWIRE & SONS, Bellaport and Mount Farms, Market Drayton, for **Mount Sweetheart**, born in 1918, calved June 10, 1925, bred by W. H. Hobson, Woodhey Hall, Nantwich.

1640 II. (£10.)—LIEUT.-COLONEL WILLIAM EDWARD HARRISON, O.B.E., Wychnor Park, Burton-on-Trent, for **Cliftonthorpe Royal** 3628, calved June 22, 1925, breeder and age unknown.

1642 III. (£5.)—R. H. A. HOLBECH, The Grange, Farnborough, Banbury, for **Charisworth Blossom** 1106, age unknown, calved July 1, 1925, bred by Randolph Tory, Charisworth Manor, Blandford.

1641 IV. (£4.)—HASSOP ESTATE CO., Hassop Hall, Bakewell, for **Hassop Bluebell**, born May 21, 1922, calved May 23, 1925, bred by Lieut.-Colonel H. K. Stephenson, D.S.O., Hassop Hall, Bakewell; *s.* Blue Cap, *d.* Hassop Buttercup.

1636 V. (£3.)—ARNOLD GILLETT, Ridgwood, Chorley, Lancs, for **Bradbourne Hiawatha**, born in 1921, calved June 19, 1925, bred by A. Trafford, Ashbourne, Derby.

1646 R. N.—T. H. SWIRE & SONS, for **Mount Kitty.**

H. C.—1645.

Class 197.—*Blue Albion Heifers, born in* 1923.

1653 I. (£15.)—LIEUT.-COLONEL WILLIAM EDWARD HARRISON, O.B.E., Wychnor Park, Burton-on-Trent, for **Poplars Sweetheart** 8848, born April 16, bred by Mrs. Howard, Ley Hill Farm, Doveridge; *s.* Hurdlow Challenger 59, *d.* Poplars Mabel 6082.

1650 II. (£10.)—ARNOLD GILLETT, Ridgwood, Chorley, Lancs, for **Bradbourne Maizie 2nd**, born Oct. 7, bred by A. Trafford, Ashbourne, Derby; *s.* Bradbourne Masterpiece, *d.* Bradbourne Maizie.

1649 III. (£5.)—ARNOLD GILLETT, for **Adderley Cowslip**, born Aug. 26, bred by W. H. Holdcroft, Church Farm, Adderley, Market Drayton; *s.* Bramshall Wild Blood 37, *d.* Adderley Hassall 1518.

1648 R. N.—PERCY DOBSON, Manor Farm, Ridgwardine, Market Drayton, for **Ridgwardine Joan.**

H. C.—1654. C.—1652.

Class 198.—*Blue Albion Heifers, born in* 1924.[1]

1659 I. (£15.)—LIEUT.-COLONEL WILLIAM EDWARD HARRISON, O.B.E., Wychnor Park, Burton-on-Trent, for **Barton Sweetheart**, born Feb. 17; *s.* Barton Jude 199, *d.* Bradbourne Sweetheart 996.

1661 II. (£10.)—JOHN D. SEALS, Home Farm, Snelston, Ashbourne, for **Pike Hawthorn**, born Jan. 31; *s.* Bradbourne Major 141, *d.* Pike Jessie 6022.

1656 III. (£5.)—PERCY DOBSON, Manor Farm, Ridgwardine, Market Drayton, for **Adderley Bright Eyes**, born March 20, bred by W. H. Holdcroft, Holly Farm, Norton-in-Hales; *s.* Hurdlow Champion 61, *d.* Adderley Mona 1538.

1658 R. N.—ARNOLD GILLETT, Ridgwood, Chorley, Lancs, for **Ridgwood Ruth.**

H. C.—1663. C.—1657.

British Friesians.

The letters F. R. S. after the number of an animal indicate that such animal is registered in the Friesch Rundvee Stamboek (Friesland Cattle Herd Book) Zwartebonte (Black and White) Section.

The letters H., F. R. S., refer to the Hulpstamboek (Auxiliary Herd Book) Zwartebonte (Black and White) Section of the Freisch Rundvee Stamboek.

The letters F. H. B., S.A., after the number of an animal indicate that such animal is registered in the Friesland Herd Book, South Africa.

The letters S. A. S. B. after the name of an animal indicate that such animal is registered in the South African Stud Book.

The letters P. I. after the name of an animal indicate that such animal is of pure imported Friesian (Holland) or South African blood.

Unless otherwise stated the numbers refer to the British Friesian Herd Book.

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[1] Prizes given by the Blue Albion Cattle Society.

Class 199.—*British Friesian Bulls, born in or before* 1922.

1683 **I. (£15, & Champion.[1])**—Lord Rayleigh, Terling, Essex, for **Terling (imp. 1922) Marthus** 21533, born May 18, 1921, bred by the Golden Valley Citrus Estates, Ltd., Mooi River, Natal; *s.* Cragie Marthus 3rd 81 F.H.B., S.A., *d.* Meidema 4th 1656 S.A.S.B. *by* Johan Ceres 5679 F.R.S.

1671 **II. (£10.)**—Miss A. Guest, Inwood, Templecombe, Somerset, for **Dunninald Rijpmaster** 16777 P.I., born July 12, 1921, bred by the Exors. of Major David Spence, Montrose; *s.* Seaton Roland 10593 P.I., *d.* Inwood (imp.) Rijpma 10th 18156 *by* De Verwachting 2nd 4429 F.R.S.

1668 **III. (£5, & Champion.[2])**—George T. Eaton, Thurston Hall, Framfield, Uckfield, Sussex, for **Thurston Karel President** 21581, born Jan. 1, 1922; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Foxlease Noel 17778 *by* Wigginton Pippin 2235.

1670 **IV. (£4.)**—F. W. Gilbert and G. Woodfield, Weston Hall, Weston-on-Trent, Derby, for **Seaton Roland** 10593 P.I., born May 10, 1918, bred by G. A. Francis, Seaton, Arbroath; *s.* Commieston (imp.) Roland 3721, *d.* Seaton (imp.) Johanna 5th 19252 *by* Geert 2nd 5695 F.R.S.

1679 **V. (£3.)**—The Trustees of David Moseley, Smithy Farm, Buglawton, Congleton, for **Clockhouse King Akrin** 11321 P.I., born Jan. 22, 1919, bred by Trevor Williams, Pynesfield Manor, West Hyde, Rickmansworth; *s.* Clockhouse Rinlod 7513 P.I., *d.* Garton (imp.) Akke 6th 17794 *by* Albert 2nd 5611 F.R.S.

1676 **R. N.**—Robert Lee Jobling, Higham Dykes, Melbourne, Newcastle-on-Tyne, for **Knightley Glor Pel.**

Class 200.—*British Friesian Bulls, born on or between January* 1 *and June* 30, 1923.

1686 **II. (£10, & R. N. for Champion.[2])**—A. and J. Brown, Hedges Farm, St. Albans, for **Hedges Prince Jan** 23089, born June 7; *s.* Wigginton (imp.) Johan 4637, *d.* Hedges Gracious Dutch 24962 *by* Hedges (imp.) Fokke 2nd 3993.

1688 **III. (£5.)**—Vyvian George Harmsworth, Valley Holme, Horsted Keynes, Sussex, for **Thurston Karel Sunstar** 24437, born Feb. 4, bred by George T. Eaton, Thurston Hall, Framfield, Sussex; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Foxlease Noel 17778 *by* Wigginton Pippin 2235.

Class 201.—*British Friesian Bulls, born on or between July* 1 *and December* 31, 1923.

1696 **II. (£10.)**—James Mason Woodville, Broadlake, Willaston, Birkenhead, for **Bulkeley Terra Dew** 22207, born Nov. 19, bred by I. B. and H. L. Jarmay, Bulkeley Hall, Malpas; *s.* Bulkeley Dewwijk 13399, *d.* Bulkeley Terra 37606 *by* Bulkeley (imp.) Mietjes Ceres 3625.

1691 **III. (£5.)**—Sir Cyril Kendall Butler, K.B.E., Bourton House, Shrivenham, Berks, for **Hardinghall Hollander** 22995, born Aug. 5, bred by Major B. M. Edwards, Hardingham Hall, Norfolk; *s.* Douneside Hollander 2nd 16645 P.I., *d.* Leethill Abigail 46930 *by* Melford (Imp.) Zeppelin 4179.

Class 202.—*British Friesian Bulls, born on or between January* 1 *and June* 30, 1924.[3]

1710 **I. (£15, & R. N. for Champion.[1])**—Edward Hollingworth, C.B.E., Moordale, Dobcross, Yorks, for **Hache Buringa** P.I., born Jan. 15, bred by the Hache Herd, Muntham Home Farm, Findon; *s.* Hache Cerjan Ulysses 14165 P.I., *d.* Clockhouse Vic-Rinze 37868 P.I. *by* Clockhouse (imp.) Vic Wouter 3691.

1700 **II. (£10.)**—Walter A. Brocklehurst, Henbury Park, Macclesfield, for **Henbury Karel Conjuror** P.I., born Jan. 5; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Brooklands Princess Eirene 32252 P.I. *by* Tredegar (imp.) Prince of Holland 4579.

1705 **III. (£5.)**—Major B. M. Edwards, M.C., Hardingham Hall, Hingham, Norfolk, for **Northdean Hollander 4th** P.I., born June 15, bred by G. Holt Thomas, Northdean House, Hughenden; *s.* Dell Hollander 7655 P.I., *d.* Haydon Meibloem 39454 P.I. *by* Osmaston (imp.) Frits 4293.

1701 **IV. (£4.)**—A. and J. Brown, Hedges Farm, St. Albans, for **Hache Bacchus** P.I., born March 27, bred by the Hache Herd, Muntham Home Farm, Findon; *s.* Clockhouse King Akrin 11321 P.I., *d.* Seaton Johanna 30858 P.I. *by* Dunninald (imp.) Cesar 2nd 3813.

1706 **V. (£3.)**—Ethelbert Furness, Hamels Park, Buntingford, Herts, for **Hamels Froukje's Ronald** P.I., born Feb. 17; *s.* Seaton Roland 10593 P.I., *d.* Hedges (imp.) Froukje 3rd 18050 *by* Ceres 4497 F.R.S.

1711 **R. N.**—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Northdean Meibloem's Beatty.**

Class 203.—*British Friesian Bulls, born on or between July* 1 *and December* 31, 1924.[3]

1719 **I. (£15.)**—Frank Griffiths, Tyddyn Farm, Mold, North Wales, for **Mapleton Hilko's Ironclad** P.I., born Sept. 14, bred by James Russel, Mapleton, Edenbridge; *s.* Mapleton (imp. 1922) Hilko 20907, *d.* Tarvin Hatsumer 3rd 42206 P.I. *by* Cymric (imp.) Frits 3755.

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[1] Champion Prize of £10 given by the British Friesian Cattle Society for the best Bull in Classes 199 to 203.

[2] The "Wobaston" Silver Challenge Cup, value £50, given through the British Friesian Cattle Society, for the best Bull, bred by the Exhibitor, in Classes 199 to 203.

[3] Prizes, except the Fourth and Fifth, given by the British Friesian Cattle Society.

1718 II. (£10.)—C. W. H. Glossop, Lund, Beverley, for **Lund Blanche's Beatty** P.I., born Oct. 21; *s.* Lund (imp. 1922) Rensche's Beatty 20863, *d.* Lund (imp. 1922) Blanche 22nd 64104 *by* Bedford Albert 5th 1870 S.A.S.B.

1720 III. (£5.)—The Hache Herd, Muntham Home Farm, Findon, Worthing, for **Hache Burinze** P.I., born Nov. 27; *s.* Hache Cerjan Ulysses 14165 P.I., *d.* Clockhouse Vic Rinze 37868 P.I. *by* Clockhouse (imp.) Vic Wouter 3691.

Class 204.—*British Friesian Cows (in-milk), born in or before* 1921.

1728 I. (£15.)—Lord Barnby, Blyth Hall, via Rotherham, for **Beccles Queen Anne** 23430, born Sept. 14, 1916, calved April 15, 1925, bred by F. W. D. Robinson, Roos Hall, Beccles; *s.* Beccles (imp.) Lodewijk 3501, *d.* Beccles Blackspot 13924 *by* Beccles Fingringhoe 899.

1738 II. (£10.)—Captain John Christie, M.C., Glyndebourne, Ringmer, Lewes, for **Terling Breeze 8th** 36182, born Aug. 11, 1918, calved May 25, 1925, bred by Lord Rayleigh, Terling; *s.* Lavenham (imp.) Gysbrecht 4077, *d.* Terling Breeze 6th 26718 *by* Terling (imp.) Vic Bertus 4541.

1726 III. (£5.)—Arthur Allen, The Manor, Chesterblade, Somerset, for **Glen Werribee** 52964, born April 15, 1921, calved April 28, 1925; *s.* Dunninald Gaatsomairschaap 6175 P.I., *d.* Fingringhoe Walnut 21080 *by* Moordale Victor 1809.

1755 IV. (£4.)—I. B. and H. L. Jarmay, Bulkeley Hall, Malpas, for **Bulkeley Aphrodite** 37562, born Oct. 21, 1919, calved Dec. 2, 1924; *s.* Golf Botermijn 2nd 6327 P.I., *d.* Rhydbroughton Beauty 15802 *by* Melford Ivory 471.

1741 V. (£3.)—Major B. M. Edwards, M.C., Hardingham Hall, Hingham, Norfolk, for **Blenheim Bramrinschaap** 50756, born Sept. 9, 1921, calved Jan. 12, 1925, bred by the Duke of Marlborough, Blenheim; *s.* Dunninald Gaatsomairschaap 6175 P.I., *d.* Clockhouse Bramrin 37852 *by* Clockhouse Rinlod 7513 P.I.

1751 R. N.—Stuart Heaton, Poplar Farm, Iken, Tunstall, Suffolk, for **Sudbourne Dairymaid.**
H. C.—1750. C.—1753.

Class 205.—*British Friesian Heifers (in-milk), born in* 1922.[1]

1793 I. (£15, & **Champion.**[2])—Albert Weightman, Middle Herrington Dairy Farm, Sunderland, for **Hamels Empress** 62124, born March 26, calved Nov. 14, 1924, bred by E. Furness, Hamels Park, Buntingford; *s.* Dunninald Gaatsomairschaap 6175 P.I., *d.* Pomona Queen 26192 *by* Cradlehall (imp.) Hollander 3737.

1787 II. (£10.)—Edward Hollingworth, C.B.E., Moordale, Dobcross, Yorks, for **Hache Will o' the Wisp** 61958, born May 18, calved April 24, 1925, bred by the Hache Herd, Muntham Home Farm, Findon; *s.* Clockhouse King Akrin 11321 P.I., *d.* Muntham Verey Light 35066 *by* Kingswood (imp.) Ynte 4047.

1781 III. (£5.)—George T. Eaton, Thurston Hall, Framfield, Uckfield, Sussex, for **Thurston Mayflower 2nd** 66892, born May 22, calved May 16, 1925; *s.* Kirkhill Michael 12055, *d.* Teston Muscatel 42388 *by* Terling Dutchman 5643 P.I.

1788 IV. (£4.)—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Northdean Meibloem 2nd** 64796 P.I., born Nov. 5, calved June 4, 1925; *s.* Terling (imp.) Vic Bertus 4541, *d.* Northdean Meibloem 47738 P.I. *by* Dell Hollander 7655 P.I.

1786 V. (£3.)—F. Orlando Hellyer, The Hall, Middleton-on-the-Wolds, Driffield, for **Knebworth Dawn Mist** 63210, born Sept. 17, calved April 26, 1925, bred by W. and R. Wallace, Knebworth; *s.* Hedges Second Series 6427 P.I., *d.* Kingswood Dawn Mist 25194 *by* Kingswood (imp.) Ynte 4047.

1779 R. N.—A. and J. Brown, Hedges Farm, St. Albans, for **Thornhill Jessie.**
H. C.—1783.

1788, 1819, 1839 **Trophy,**[3] **& R. N. for Cup.**[4]—G. Holt Thomas, for **Northdean Meibloem 2nd, Northdean Barbara** and **Northdean Princess May 2nd.**

1779, 1811, 1825 **Cup.**[4]—A. and J. Brown, for **Thornhill Jessie, Hedges Japhonica** and **Hedges Albert's Countess.**

Class 206.—*British Friesian Heifers, born on or between January* 1 *and June* 30, 1923.

1798 I. (£15.)—Ethelbert Furness, Hamels Park, Buntingford, Herts, for **Hamels Florida** 71930, born May 21; *s.* Seaton Roland 10593 P.I., *d.* Corsebar Rose 24018 *by* Moss (imp.) Adema 49th 4223.

1795 II. (£10.)—Captain John Christie, M.C., Glyndebourne, Ringmer, Lewes, for **Glyndebourne Breeze** 71578, born June 29; *s.* Dunninald Haeayemairschaap 7699 P.I., *d.* Terling Breeze 8th 36182 *by* Lavenham (imp.) Gysbrecht 4077.

1799 III. (£5.)—W. H. R. Gilbert, The Cottage, Aston Flamville, Hinckley, for **Haydon Stella** 72190, born April 22, bred by Mrs. Putnam, Farringdon, Exeter; *s.* Haydon (imp. 1922) Pilot 20279, *d.* Haydon Cherry Blossom 39440 *by* Routh Dutchman 6939 P.I.

1807 IV. (£4.)—The Trustees of David Moseley, Smithy Farm, Buglawton, Congleton, for **Thurston Karel Stephanotis 3rd** 77006, born Feb. 3, bred by G. T. Eaton, Thurston Hall, Framfield; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Gorstage Gloaming 2nd 14854 *by* Gorstage Graaf 1361.

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[1] Prizes, except the Fourth and Fifth, given by the British Friesian Cattle Society.

[2] Champion Prize of £10 given by the British Friesian Cattle Society for the best Cow or Heifer in Classes 204 to 209.

[3] Perpetual Bronze Challenge Trophy, value Fifty Guineas, given by the Friesland Cattle Breeders' Association for the best group of three British Friesian animals bred by Exhibitor in Classes 199 to 209.

[4] Silver Challenge Cup, value Fifty Guineas, given through the British Friesian Cattle Society for the best group of three Cows or Heifers in Classes 204 to 209.

1803 **V. (£3.)**—Edward Hollingworth, C.B.E., Moordale, Dobcross, Yorks, for **Moordale Peggy's Johanna** 74246, born June 16; *s.* Wigginton (imp.) Johan 4637, *d.* Hedges Dutch Peggy 45868 *by* Hedges (imp.) Fokke 2nd 3993.
1802 **R. N.**—Hache Herd, Muntham Home Farm, Findon, Worthing, for **Moorside Flora.**
H. C.—1797.

Class 207.—*British Friesian Heifers, born on or between July* 1 *and December* 31, 1923.

1811 **I. (£15, & R. N. for Champion.[1])**—A. and J. Brown, Hedges Farm, St. Albans, for **Hedges Japhonica** 72248, born Oct. 21; *s.* Wigginton (imp.) Johan 4637, *d.* Hedges Honesty 33928 *by* Hedges (imp.) Fokke 2nd 3993.
1819 **II. (£10.)**—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Northdean Barbara** 74624 P.I., born Sept. 15; *s.* Northdean (imp. 1922) Marthus Beatty 21081, *d.* Clockhouse (imp. 1922) Barbara 60100 *by* Nels Rust General Burger 817 F.H.B., S.A.
1812 **III. (£5.)**—George T. Eaton, Thurston Hall, Framfield, Uckfield, Sussex, for **Thurston Karel Daisy 2nd** 76964, born July 1; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Colton Unique 14336 *by* Colton Puritan 95.
1818 **IV. (£4.)**—Edward Hollingworth, C.B.E., Moordale, Dobcross, Yorks, for **Moordale Pauline** 74244 P.I., born Sept. 21; *s.* Moordale (imp. 1922) Paul 20965, *d.* Moordale Winmargen 55326 P.I. *by* Marsh (imp.) Generaal 4157.
1816 **V. (£3.)**—W. H. R. Gilbert, The Cottage, Aston Flamville, Hinckley, for **Astonville Jane** 67984, born Oct. 9; *s.* Terling (imp. 1922) Marthus 21533, *d.* Terling Jane 8th 57330 *by* Terling Trojan 8811 P.I.
1813 **R. N.**—George T. Eaton, for **Thurston Karel Marguerite 2nd.**

Class 208.—*British Friesian Heifers, born on or between January* 1 *and June* 30, 1924.[2]

1838 **I. (£15.)**—Edward Hollingworth, C.B.E., Moordale, Dobcross, Yorks, for **Moordale Pauletta,** born Jan. 8; *s.* Moordale (imp. 1922) Paul 20965, *d.* Moordale Bouquet 3rd 47524 *by* Wychnor (imp.) Yme 4709.
1825 **II. (£10.)**—A. and J. Brown, Hedges Farm, St. Albans, for **Hedges Albert's Countess,** born Jan. 24; *s.* Petygards (imp.) Bles Albert 4321, *d.* Wigginton Dutch Countess 27078 *by* Wigginton (imp.) Johan 4637.
1839 **III. (£5.)**—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Northdean Princess May 2nd,** born March 22; *s.* Northdean (imp. 1922) Marthus Beatty 21081, *d.* Northdean Princess May 55622 *by* Dell Hollander 7655 P.I.
1844 **IV. (£4.)**—Bertram Parkinson, Creskeld Hall, Arthington, Yorks, for **Creskeld Hazeline 2nd,** born Feb. 25; *s.* Creskeld (imp. 1922) Chief 19709, *d.* Brooklands Hazeline 27728 *by* Reddown (imp.) Murk 4377.
1829 **V. (£3.)**—Major B. M. Edwards, M.C., Hardingham Hall, Hingham, Norfolk, for **Hardinghall Bramrinschaap,** born Jan. 4; *s.* Douneside Hollander 2nd 16645 P.I., *d.* Blenheim Bramrinschaap 50756 *by* Dunninald Gaatsomairschaap 6175 P.I.
1828 **R. N.**—George T. Eaton, Thurston Hall, Framfield, Uckfield, for **Thurston Ynte Ellen.**
H. C.—1842. **C.**—1845.

Class 209.—*British Friesian Heifers, born on or between July* 1 *and December* 31, 1924.[2]

1864 **I. (£15.)**—Ledgard & Brown, Primrose Dairy Farm, Mirfield, Yorks, for **Primrose Molly,** born July 1; *s.* Lund (imp. 1922) Rensche's Beatty 20863, *d.* Pomona Amy 30504 *by* Gorstage (imp.) Mietje's Victor 3939.
1853 **II. (£10.)**—George T. Eaton, Thurston Hall, Framfield, Uckfield, Sussex, for **Thurston Karel Jeltje** P.I., born Aug. 14; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Terling Jeltje 2nd 42300 P.I. *by* Terling (imp.) Verwachting 4543.
1860 **III. (£5.)**—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Northdean Dieuwke 2nd** P.I., born July 1; *s.* Dell Hollander 7655 P.I., *d.* Northdean (imp. 1922) Dieuwke 64782 *by* Marten 806 S.A.S.B.
1852 **IV. (£4.)**—George T. Eaton, for **Thurston Karel Anemone 2nd,** born Aug. 30; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Pomona Anemone 30506 *by* Gorstage (imp.) Mietje's Victor 3939.
1863 **V. (£3.)**—Mrs. S. Johnson, The Gladlas, Ellesmere, Salop, for **Gadlas Rolands Daisy 2nd,** born July 2; *s.* Havels Roland 20227, *d.* Haslington Buttercup 45698 *by* Monkton Warrior 10277.
1849 **R. N.**—John Bromet, Golf Links Farm, Tadcaster, for **Golf Dorander.**
H. C.—1857. **C.**— 1858.

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[1] Champion Prize of £10 given by the British Friesian Cattle Society for the best Cow or Heifer in Classes 204 to 209.

[2] Prizes, except the Fourth and Fifth, given by the British Friesian Cattle Society.

Ayrshires.

Class 210.—*Ayrshire Bulls, born on or before September* 1, 1924.

1872 I. (£15.)—James Howie, Hillhouse, Kilmarnock, for **Hobsland Duplicate** 22581, born March 25, 1922, bred by Thomas Barr, Hobsland, Monkton; *s.* Hobsland Lucky Boy 16482, *d.* Hobsland Lovely 5th 51072 *by* Hobsland Perfect Piece 10665.

1871 II. (£10.)—Thomas Barr, Hobsland, Monkton, Ayrshire, for **Caigton Here's Luck** 22378, born Feb. 8, 1922, bred by James B. Crawford, Caigton, Castle Douglas; *s.* Hobsland Lucky Star 19597, *d.* Caigton Pink 3rd A 221 *by* Chapmanton Snowflake 7150.

1874 III. (£5.)—James Howie, for **Millantae Better Still**, born March 15, 1924, bred by John Johnstone, Millantae, Lockerbie; *s.* Bargenoch Nugget 18484, *d.* Millantae Mayflower 58092 *by* Overton Hiawatha 11054.

Class 211a.—*Ayrshire Cows (in-milk), born on or before September* 1, 1921.

1881 I. (£15.)—James Howie, Hillhouse, Kilmarnock, for **Friendlesshead Blossom 4th** 40942, born in April, 1913, calved June 12, 1925, bred by J. Hodge, Friendlesshead, Mauchline; *s.* Craighead Guardsman 9578, *d.* Friendlesshead Blossom A 403 *by* Whitehill Fortune 5199.

1887 II. (£10.)—Jacob S Murray, Dalgig, New Cumnock, for **Dalgig Keepsake** 86637, born in March, 1920, calved May 31, 1925; *s.* Dalgig General French 14573, *d.* Carston Cinderella 3rd 36326 *by* Carston Merry King 8307.

1878 III. (£5.)—Major C. Randolph Dudgeon, Cargen Holm, Dumfries, for **Cargen Holm Daisy 4th** 73716, born Nov. 2, 1917, calved April 6, 1925; *s.* Cargen Holm Baron Lindsay 15464, *d.* Cargen Holm Daisy 2nd 50623 *by* Langside Rich and Rare 10299.

1879 R. N.—Major C. Randolph Dudgeon, for **Cargen Holm Miss Robb 7th.**
C.—1885.

Class 211b.—*Ayrshire Cows (in-calf), born on or before September* 1, 1921.

1882 I. (£15.)—John Johnstone, Millantae, Lockerbie, for **Millantae Mayflower** 58092, born April 3, 1917; *s.* Overton Hiawatha 11054, *d.* Chapelerne Flower 2nd 38906 *by* Chapmanton Charmer 8703.

1876 II. (£10.) Alexander Cochrane, Nether Craig, Kilmarnock, for **Beuchan Heather 2nd** 56762, born Dec. 19, 1918, bred by the Misses Allan, Beuchan, Thornhill; *s.* Hobsland First Choice 16478, *d.* Beuchan Heather 49835 *by* Beuchan Toddle Ben 9530.

1886 III. (£5.)—Jacob S. Murray, Dalgig, New Cumnock, for **Carston Rhoda** 52271, born April, 1915; *s.* Carston St. Thomas 7904, *d.* Carston Cinderella 2nd 36325 *by* Carston Merry King.

1877 R. N.—John Cochrane, Byreholm, Thornhill, for **Maqueston Mayflower.**
H. C.—1880. C.—1888.

Class 212.—*Ayrshire Cows or Heifers (in-milk or in-calf), born after September* 1, 1921.[1]

1891 I. (£15.)—Thomas Barr, Hobsland, Monkton, for **Hobsland Violet 4th** 88594, born Nov. 15, 1922; *s.* Hobsland Lucky Boy 16482, *d.* Hobsland Violet 3rd 68010 *by* Thornhill Sir George 17319.

1893 II. (£10.)—John Cochrane, Byreholm, Thornhill, for **Byreholm Viper 2nd** 90389, born Aug. 28, 1922, in calf; *s.* Cairnmill Lord Glenside 20970, *d.* Byreholm Viper 85789 *by* Morton Mains Militant 14477.

1892 III. (£5.)—Alexander Cochrane, Nether Craig, Kilmarnock, for **Nether Craig Randy** 89807, born Sept. 16, 1921, calved May 20, 1925, bred by J. Wilson, Boghead, Mouswald, Dumfries; *s.* Nether Craig Magnet 18370, *d.* Boghead Randy 54030 *by* Boghead Dainty Davie 9404.

Guernseys.

N.B.—Unless otherwise stated the numbers refer to the English Guernsey Herd Book.

Class 213.—*Guernsey Bulls, born in or before* 1922.

1899 I. (£15, & Champion.[2])—George Blight & Son, Tregonning, Breage, Helston, for **Tregenna May Bird** 4961, yellow and white, born April 30, 1922, bred by the Great Western Railway Co., Tregenna Castle Hotel, St. Ives, Cornwall; *s.* Herriard Dandy 3954, *d.* Tregenna Lady May 14809 *by* Trengwainton Bold Robin 3818.

1898 II. (£10.)—A. Chester Beatty, Calehill Park, Little Chart, Kent, for **Yvonne's Honour** 5711, fawn and white, born May 5, 1920, bred by A. Gavet, Friquet de Haut, Castel, Guernsey; *s.* Deceit of King's Mills 4108 P.S., R.G.A.S., *d.* Golden Yvonne of Ashburton 14091 P.S., R.G.A.S. *by* Deanie's Squire 2734 P.S., R.G.A.S.

1900 III. (£5.)—J. B. Body, Hindhead Court, Hindhead, Surrey, for **Hindhead Governor** 4842, fawn and white, born Oct. 24, 1922; *s.* Governor 4th des Ruettes 3718, *d.* Rosey of Goodnestone 12343 *by* Gunner 3rd 2459.

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[1] Prizes given by the Ayrshire Cattle Herd Book Society.

[2] Champion Prize of £5 given by the English Guernsey Cattle Society for the best Bull in Classes 213 to 215.

1896 **IV. (£4.)**—W. A. ARGENT, Ghyll Manor, Rusper, Sussex, for **Governor of Myrtle Place 5th** 5445, fawn and white, born May 29, 1919, bred by Ernest de Garis, Myrtle Place, Castel, Guernsey; *s.* Valentine Honour of the Passée 3826, *d.* La Fleur du Jardin 12th 5619 P.S., R.G.A.S. *by* Governor of the Chene 1297 P.S., R.G.A.S.

1902 **R. N.**—SIR HARRY GOSCHEN, K.B.E., Durrington House, Harlow, for **Hunguets Des Bas Hope 2nd.**

Class 214.—*Guernsey Bulls, born in* 1923.

1907 **I. (£15, & R. N. for Champion.[1])**—W. A. ARGENT, Ghyll Manor, Rusper, Sussex, for **Lynchmere Lord Roberts 20th** 5335, fawn and white, born Aug. 31, bred by Mrs. Pratt Barlow, Lynchmere, Surrey; *s.* Robert's Boy's Sequel 2496, *d.* Tregye Coral 14835 *by* Ladock Prince Charming 3165.

1912 **II. (£10.)**—JOHN A. KAY, Ravenscroft Hall, Middlewich, for **Elfordleigh Major** 5021, fawn and white, born April 10, bred by Mrs. R. C. Bainbridge, Elfordleigh, Plympton; *s.* Elfordleigh Jewel 4470, *d.* Elfordleigh Maggie 3rd 15316 *by* Hammill of Marazion 3334.

1906 **III. (£5.)**—W. A. ARGENT, for **Honour of the Cloture** 5334, fawn and white, born Jan. 19, bred by N. Ogier, Cloture Cottage, Castel, Guernsey; *s.* Nellie's Ideal 4522 P.S., R.G.A.S., *d.* Primrose of the Cloture 18400 P.S., R.G.A.S. *by* Governor of Lily Vale 3853 P.S., R.G.A.S.

1914 **IV. (£4.)**—VISCOUNT LASCELLES, K.G., Goldsborough Hall, Knaresborough, for **Goldsborough Golden Prince** 5321, fawn and white, born June 29; *s.* Brittleware Princeling 3282, *d.* Bosistow Marigold 11154 *by* Godolphin Sambo 2450.

1910 **R. N.**—GEORGE BLIGHT & SON, Tregonning, Breage, Helston, for **Hornblotton Golden Arch.**

Class 215.—*Guernsey Bulls, born in* 1924.[2]

1925 **I. (£15.)**—LORD POLTIMORE, Court Hall, North Molton, for **Poltimore Trojan** 5515, fawn and white, born June 14; *s.* Pearl's Majestic 3999, *d.* Trefoil of Diamond Farm 14808 *by* Hunguets de Bas Winsome 3643 P.S., R.G.A.S.

1916 **II. (£10.)**—W. A. ARGENT, Ghyll Manor, Rusper, Sussex, for **Ghyll Valentine's Honour** 5602, fawn and white, born July 23; *s.* Downe Valentine's Honour of Vimiera 3913, *d.* Downe Daylo 14280 *by* Sailor Lad of the Fontaines 3725 P.S., R.G.A.S.

1919 **III. (£5.)**—J. B. BODY, Hindhead Court, Hindhead, Surrey, for **Hindhead Robert 3rd** 5465, fawn and white; *s.* Lynchmere Lord Roberts 15th 3982, *d.* Morland Lady Richmond, 16788 *by* Slogans Climax 4035.

1922 **IV. (£4.)**—MRS. F. H. T. JERVOISE, Herriard Park, Basingstoke, for **Herriard Honour Bright** 5661, fawn and white, born Aug. 15; *s.* Herriard Valentine's Honour 4837, *d.* Herriard Sweet 3rd 17868 *by* Herriard Fanny's Osseo 4224.

1926 **V. (£3.)**—MRS. F. SAINSBURY, Blunts Hall, Little Wratting, Haverhill, for **Downe Valentine's Honour of Vimiera 7th** 5364, fawn and white, born Jan. 2, bred by D. C. Haldeman, Hayes, Kent; *s.* Downe Valentine's Honour of Vimiera 3913, *d.* Downe Fleur of Vimiera 14281 *by* Valentine's Honour of the Passee 3826.

1923 **R. N.**—MESSRS. C. NORMAN, Moor Place, Much Hadham, for **Honeymoon Prince of Hadham.**

H. C.—1921. **C.**—1917.

Class 216.—*Guernsey Cows (in-milk), born in or before* 1920.

1928 **I. (£15, & Champion.[3])**—W. A. ARGENT, Ghyll Manor, Rusper, Sussex, for **Flora's Buttercup of the Fountain** 20889, fawn and white, born Dec. 16, 1918, calved May 22, 1925, bred by W. B. Burton, Fountain Farm, St. Sampson, Guernsey; *s.* Bickleigh 3732 P.S., R.G.A.S., *d.* Flora 6th of the Fountain 13934 P.S., R.G.A.S. *by* Clara's Sequel 2207 P.S., R.G.A.S.

1935 **II. (£10.)**—WALTER DUNKELS, Fernhill Park, Windsor Forest, for **Starlight Broom** 15836, fawn and white, born April 20, 1919, calved June 3, 1925, bred by Mrs. Martineau, Broom Hall, Sunningdale; *s.* Hurst Freda's Jewel 2nd 3543, *d.* Brittleware Starlight 2nd 9868 *by* Brittleware Robin 2nd 2415.

1946 **III. (£5.)**—SAMUEL SEMMENS, Trevarthian, Marazion, Cornwall, for **Trevarthian Favourite** 14878, yellow and white, born Feb. 20, 1918, calved April 5, 1925, bred by the late W. Simmons, Governs, Kenwyn, Marazion; *s.* Governs George 2nd 3330, *d.* Governs Favourite 8982 *by* Ladock Dairyman 2049.

1937 **IV. (£4.)**—MRS. J. E. ELLIS, Wrea Head Farm, Scalby, Scarborough, for **Rowanberry 31st** 15754, fawn and white, born April 11, 1920, calved June 15, 1925; *s.* Donnington Charmant 2nd 3113, *d.* Rowanberry 12th 10319 *by* Hayes Emperor 2222.

1944 **V. (£3.)**—SIR JAMES REMNANT, BART., M.P., The Grange, Hare Hatch, Twyford, for **Dene Lady Hester** 15219, fawn and white, born May 24, 1920, calved March 27, 1925; *s.* Dene Lode Star 3303, *d.* Lady Hester of Rozel 13680 *by* Polly's Pride of the Spurs 3480 P.S., R.G.A.S.

1930 **R. N.**—A. CHESTER BEATTY, Calehill Park, Little Chart, Kent, for **Golden Queen of Goodnestone.**

H. C.—1936.

Class 217.—*Guernsey Cows or Heifers (in-milk), born in* 1921 *or* 1922.[2]

1962 **I. (£15, & R. N. for Champion.[3])**—MESSRS. C. NORMAN, Moor Place, Much Hadham, for **Hadham Marigold 4th** 16540, fawn and white, born March 17, 1921, calved May 23, 1925; *s.* Ladock Prince Albert 3550, *d.* Hadham Marigold 12099 *by* Hadham Goldseeker 2766.

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[1] Champion Prize of £5 given by the English Guernsey Cattle Society for the best Bull in Classes 213 to 215.

[2] Prizes, except Fourth and Fifth, given by the English Guernsey Cattle Society.

[3] Champion Prize of £5 given by the English Guernsey Cattle Society for the best Cow or Heifer in Classes 216 to 219.

1953 **II.** (£10.)—J. B. Body, Hindhead Court, Hindhead, Surrey, for **Morland Lady Richmond** 16788, fawn and white, born Feb. 15, 1921, calved June 10, 1925, bred by G. F. Ferrand, Morland Hall, Alton; *s.* Slogans Climax 4035, *d.* Richmond's Zoe of la Ruette 13845 *by* Ivy's Emblem 3804.

1964 **III.** (£5.)—William Roach, Trewidden Farm, Penzance, for **Trewidden Gladiolus 3rd** 18476, lemon and white, born Sept. 3, 1922, calved May 4, 1925; *s.* Trewidden Magnet 4357, *d.* Trewidden Gladiolus 2nd 15940 *by* Chywoone Kola Nut 3293.

1956 **IV.** (£4.)—Misses Hargreaves, Nazeing Park, Waltham Cross, for **Nazeing Marigold** 18118, fawn and white, born April 16, 1921, calved April 24, 1925, bred by the late W. Lawrence, Belchers Farm, Nazeing; *s.* Durrington Rose King des Houards 3685, *d.* Kingsmoor Golden Maid 4th 10137 *by* Kingsmoor Count 2320.

1958 **V.** (£3.)—Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke, for **Cloth of Frie Baton** 19924, fawn and white, born Sept. 19, 1922, calved March 17, 1925, bred by F. Browning, Norgiots, St. Andrews, Guernsey; *s.* Cyrene's Lad of the Rouvettes 4252 P.S., R.G.A.S., *d.* Cloth of Gold 7th 10951 P.S., R.G.A.S. *by* Billy's France 2194 P.S., R.G.A.S.

1959 **R. N.**—Mrs. F. H. T. Jervoise, for **Herriard Dora 3rd.**

H. C.—1960. **C.**—1954.

Class 218.—*Guernsey Heifers, born in* 1923.

1973 **I.** (£15.)—Viscount Lascelles, K.G., Goldsborough Hall, Knaresborough, for **Goldsborough Margaret** 19908, fawn and white, born March 4; *s.* Claremont King Cup 4429, *d.* Claremont Princess Daisy 15154 *by* Brittleware Princeling 3282.

1968 **II.** (£10.)—George Blight & Son, Tregonning, Breage, Helston, for **Jane of Tregonning 7th** 18703, yellow and white, born April 30; *s.* Puddington Toreador 4296, *d.* Tregonning Jane 3rd 14816 *by* Hammill of Marazion 3334.

1967 **III.** (£5.)—A. Chester Beatty, Calehill Park, Little Chart, Kent, for **Calehill Peaceful** 18659, fawn and white, born Feb. 14; *s.* Clara's Slogan 4518 P.S., R.G.A.S., *d.* Peace Poundstock 18145 *by* Lenore's Sequel of Vimiera 4247.

1966 **R. N.**—A. Chester Beatty, for **Calehill Lizzie.**

Class 219.—*Guernsey Heifers, born in* 1924.

1981 **I.** (£15.)—J. B. Body, Hindhead Court, Hindhead, Surrey, for **Hindhead Poppy** 20420, fawn and white, born May 12; *s.* Lynchmere Lord Roberts 15th 3982, *d.* **Hindhead Polly** 16602 *by* Slogan de Bon Espoir 4317.

1979 **II.** (£10.)—George Blight & Son, Tregonning, Breage, Helston, for **Penbeagle Laughter** 20392, yellow and little white, born April 26, bred by E. H. Best, Albert House, St. Ives, Cornwall; *s.* Trendrine Gay Lad 4640, *d.* Saint Eia 16977 *by* Engew Gay Boy 2nd 3696.

1985 **III.** (£5.)—E. Jenkins, Netherleigh, Hayle, for **Netherleigh Bluebell** 20722, fawn and white, born May 22; *s.* Lynchmere Lord Roberts 13th 3748, *d.* Boscarne Butter Queen 15079 *by* Stagenhoe Duke 2nd 3596.

1990 **IV.** (£4.)—William Roach, Trewidden Farm, Penzance, for **Trewidden Bella 3rd** 20387, lemon and white, born May 14; *s.* Trewidden Copper Plate 4982, *d.* Bella of the Epinel 13258 *by* Brilliant of the Gree 4th 3822 P.S., R.G A.S.

1989 **V.** (£3.)—Viscount Lascelles, K.G., Goldsborough Hall, Knaresborough, for **Goldsborough Mayflower** 21683, born Aug. 31; *s.* Primrose Bellfounder 5108, *d.* Bosistow Marigold 11154 *by* Godolphin Sambo 2450.

1980 **R. N.**—J. B. Body, for **Hindhead Polly 4th.**

H. C.—1988. **C.**—1987.

Jerseys.

N.B.—In the Jersey Classes, the number inserted within brackets after the name of an animal indicates the number of such animal in the Island Herd Book. A number without brackets indicates that the animal is registered in the English Jersey Herd Book.

Class 220.—*Jersey Bulls, born in or before* 1922.

2001 **I.** (£15, & **Champion.**[1])—R. Bruce Ward, Godinton, Ashford, Kent, for **Canterbury Pilgrim** 14561, broken colour, born April 9, 1921; *s.* Pilgrim 13699, *d.* Caper *by* Capsicum 10892.

1997 **II.** (£10.)—Colonel Lionel G. Gisborne, C.M.G., Lingen Hall, Brampton Brian, Herefordshire, for **Ocean Premier** 14065, whole colour, born Jan. 19, 1921, bred by N. du Feu, Trinity, Jersey; *s.* Masterman of Oaklands 13020, *d.* Ocean Dairy Cowslip (25023) P.S., H.C. *by* Dairylike's Majesty 12583.

2000 **III.** (£5.)—T. Eustace Smith, Wormingford Grove, Wormingford, Essex, for **Danbury Majestic** 13901, whole colour, born Aug. 17, 1920, bred by Brig.-General J. T. Wigan, C.B., Danbury, Essex; *s.* Red Ensign 13397, *d.* Mitylene *by* Topsy's Noble 10116.

1995 **R. N.**—Mrs. Bertram Cater, Bentworth Lodge, Alton, Hants, for **Cupid.**

H. C.—1998, 2002.

Class 221.—*Jersey Bulls, born in* 1923.

2006 **I.** (£15, & **R. N. for Champion.**[1])—H. S. Mountain, Groombridge Place, Kent, for **Sir Laurel**, broken colour, born May 11, bred by R. Bruce Ward, Godinton, Ashford, Kent; *s.* Saint Louis 14778, *d.* Evergreen (Vol. 31, p. 273) *by* Catillon's Prince 11639.

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[1] Champion Prize of £5 given by the English Jersey Cattle Society for the best Bull in Classes 220 to 222.

2004 **II. (£10.)**—George Cross, Smarts Hill House, Penshurst, Kent, for **Gloxalia's Penshurst Pilgrim,** whole colour, born May 18; *s.* Canterbury Pilgrim 14561, *d.* Gloxalia 2nd (Vol. 33, p. 330) *by* King Capsicum 12920.

2005 **III. (£5.)**—Major A. W. Huntington, Wellesbourne House, Warwick, for **Royal Woodland Hero,** whole colour, born May 19, bred by C. Bisson, St. Marys, Jersey; *s.* Xenia's Sultan 13798, *d.* Royal Carus 3rd *by* General Cowslip 10960.

2003 **R. N.**—R. W. Carson, Lea Hall, Hatfield Heath, Harlow, for **Holmwood Volunteer.**

Class 222.—*Jersey Bulls, born in* 1924.

2012 **I. (£15.)**—George Cross, Smarts Hill House, Penshurst, Kent, for **Penshurst Cœur De Lion,** whole colour, born April 19; *s.* Penshurst Yellow Prince 14412, *d.* Gloxalia 2nd (Vol. 33, p. 330) *by* King Capsicum 12980.

2013 **II. (£10.)**—Mrs. Evelyn, Wotton House, Dorking, for **Wotton Ace De Trefles,** broken colour, born April 25; *s.* Wotton Airman 2nd 14502, *d.* Wotton Queen of Clubs (Vol. 35, p. 480) *by* Acer's Prince 13466.

2021 **III. (£5.)**—R. Bruce Ward, Godinton, Ashford, Kent, for **Pommery's Fox,** whole colour, born March 11; *s.* Marionette's Fox 13655, *d.* Pommery (Vol. 33, p. 404) *by* Prometheus 13391.

2009 **IV. (£4.)**—Mrs. Harry Briggs, The Grange, North Stoke, Wallingford, for **North Stoke's Glory,** whole colour, born March 31; *s.* Canterbury Pilgrim 14561, *d.* Petune's Victory (Vol. 30, p. 989) *by* Petune's Lad (5458) P.S.

2014 **V. (£3.)**—F. B. Imbert-Terry, Blue Hayes, Broad Clyst, Devon, for **Blue Hayes Felix the Cat,** whole colour, born May 10; *s.* Hunstrete Tuneful Lad 14322, *d.* Blue Hayes Kitten (Vol. 33, p. 75) *by* Pro-Bacchus 13085.

2010 **R. N.**—R. W. Carson, Lea Hall, Hatfield Heath, Harlow, for **Crystal Volunteer.**

Class 223.—*Jersey Cows (in-milk), born in or before* 1921.

2030 **I. (£15, & Champion.[1])**—George Cross, Smarts Hill House, Penshurst, Kent, for **Roberta Star 2nd,** broken colour, born Oct. 15, 1920, calved April 10, 1925, bred by J. Laurens, St. Lawrence, Jersey; *s.* Sybil's Gambage 3rd, *d.* Roberta Star *by* Kingsway.

2032 **II. (£10, R. N. for Champion,[1] & Special, £10.[2])**—Mrs. Evelyn, Wotton House, Dorking, for **Wotton Pink May** (Vol. 30, p. 400), broken colour, born July 25, 1916, calved May 27, 1925; *s.* Red Cloud 11818, *d.* Lady May (Vol. 22, p. 341) *by* Royal Reward 9413.

2024 **III. (£5.)**—Mrs. Harry Briggs, The Grange, North Stoke, Wallingford, for **Petune's Victory** 989, whole colour, born Aug. 26, 1918, calved May 11, 1925, bred by R. Hervé, St. Lawrence, Jersey; *s.* Petune's Lad 13068, *d.* Running Water (23949) P.S., C. *by* Anemone's Leda's Lad 12525.

2045 **IV. (£4, & Special, £5.[2])**—R. Bruce Ward, Godinton, Ashford, Kent, for **Miranda's Lass** (Vol. 33, p. 384), whole colour, born Nov. 5, 1919, calved March 10, 1925; *s.* Marionette's Lad 13351, *d.* Fairlawne Miranda *by* Sir Toby 12154.

2036 **V. (£3.)**—F. B. Imbert-Terry, Blue Hayes, Broad Clyst, Devon, for **Blue Hayes Cat** (Vol. 31, p. 234), whole colour, born March 13, 1919, calved June 7, 1925; *s.* Hotspur 12657, *d.* Catherine *by* Royal Castle 11835.

2028 **R. N.**—R. W. Carson, Lea Hall, Hatfield Heath, Harlow, for **Sweet Bread 46th.**

H. C.—2037, 2042, 2046. **C.**—2027, 2049.

Class 224.—*Jersey Heifers (in-milk), born in* 1922.

2053 **I. (£15.)**—Colonel Lionel G. Gisborne, C.M.G., Lingen Hall, Brampton Brian, Herefordshire, for **Cid's Raleigh Spectre,** black, born March 1, calved April 28, 1925, bred by A. V. Godfrey, St. Brelades, Jersey; *s.* Cid's Inkerman (5673), *d.* Christmas Spectre 23286 *by* Dandy Actor (8077).

2050 **II. (£10.)**—Grosvenor Berry, Mount Bures, Bures, Suffolk, for **Postmistress** (Vol. 34, p. 18), whole colour, born Jan. 23, calved Jan. 19, 1925; *s.* Lord Blackberry 13641, *d.* Postage 2nd *by* Verdun 12789.

2055 **III. (£5.)**—T. S. Pidduck, The Woodlands, Alsager, Cheshire, for **Ho'mwood Violet,** whole colour, born Feb. 21, calved June 15, 1925, bred by A. S. Holdern, Holmwood Lodge, Dorking; *s.* Rapkyns Black Knight 13716, *d.* Judy's Violet (Vol. 32, p. 359) *by* Petune's Lad 13068.

2058 **IV. (£4.)**—R. Bruce Ward, Godinton, Ashford, Kent, for **Pallida Iris,** whole colour, born May 21, calved April 15, 1925; *s.* Paladin 14406, *d.* Princess Ida (Vol. 33, p. 408), *by* Prometheus 13391.

2052 **R. N.**—George Cross, Smarts Hill House, Penshurst, Kent, for **Penshurst Sybil.**

H. C. 2051, 2059. **C.**—2054.

Class 225.—*Jersey Heifers (in-milk), born in* 1923.[3]

2074 **I. (£15.)**—R. Bruce Ward, Godinton, Ashford, Kent, for **Gladys** (Vol. 35, p. 174), whole colour, born Feb. 4, calved May 30, 1925; *s.* Berthe's Raleigh 13830, *d.* Gladsome 650 *by* Vesta's Oxford Laddie 13781.

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[1] Champion Prize of £5 given by the English Jersey Cattle Society for the best Cow or Heifer in Classes 223 to 226.

[2] Special Prizes of £10 (First Prize) and £5 (Second Prize), given by the English Jersey Cattle Society for Cows or Heifers in Classes 223 to 225, bred by Exhibitor, sired in Great Britain or Ireland, and milked out to the Judge's satisfaction before being judged.

[3] Prizes, except Fourth and Fifth, given by the English Jersey Cattle Society.

2071 **II.** (**£10.**)—Oscar F. Rowntree, Cherry Hill, Brandsby S.O., Yorks, for **Wotton Airelustria,** whole colour, born Jan. 25, calved May 4, 1925, bred by Mrs. Evelyn, Wotton House, Dorking; *s.* Wotton Airman 14171, *d.* Wotton Relustria (Vol. 31, p. 420) *by* Illustrious 10289.

2063 **III.** (**£5.**)—Mrs. Evelyn, Wotton House, Dorking, for **Wotton May Moon,** black, born June 19, calved June 12, 1925; *s.* Wotton Airman 2nd 14502, *d.* Wotton Pink May (Vol. 30, p. 400) *by* Red Cloud 11818.

2065 **IV.** (**£4.**)—Major A. W. Huntington, Wellesbourne House, Warwick, for **Hilda,** whole colour, born Feb. 7, calved June 29, 1925, bred by A. W. Ruggles-Brise, Spains Hall, Braintree, Essex; *s.* Park Keeper 14409, *d.* Hamletta 5th (Vol. 30, p. 292) *by* Combination 2nd 11644.

2061 **V.** (**£3.**)—George Cross, Smarts Hill House, Penshurst, Kent, for **Doreen,** whole colour, born March 4, calved May 3, 1925, bred by A. W. Ruggles-Brise, Spains Hall, Braintree, Essex; *s.* Park Keeper 14409, *d.* Lady Daphne (Vol. 32, p. 365) *by* Minorcas Jolly Sultan 12076.

2067 **R. N.**—Lieut.-Colonel C. Kerr, D.S.O., D'Anvers House, Colworth, Northampton, for **Jessy's Sultana.**

Class 226.—*Jersey Heifers, born in* 1924.

2096 **I.** (**£15.**)—R. Bruce Ward, Godinton, Ashford, Kent, for **Lepidoptera,** whole colour, born March 3; *s.* Saint Louis 14778, *d.* Elvetham Butterfly *by* Xenia's Sultan 13798.

2079 **II.** (**£10.**)—Mrs. Evelyn, Wotton House, Dorking, for **Wotton Cloud Bank,** whole colour, born April 17; *s.* Wotton Airman 2nd 14502, *d.* Wotton May Cloud (Vol. 32, p. 482) *by* Red Cloud 11818.

2082 **III.** (**£5.**)—Major A. W. Huntingdon, Wellesbourne House, Warwick, for **Wellesbourne Mermaid,** broken colour, born July 20; *s.* Ulysses 14488, *d.* Clare of Meadow View 3rd (Vol. 33, p. 291) *by* Gaulois 13576.

2077 **IV.** (**£4.**)—George Cross, Smarts Hill House, Penshurst, Kent, for **Winsome,** whole colour, born Feb. 19, bred by A. E. Renouf, Glenfarg, Reading; *s.* Broadlands Son 12858, *d.* Les Haies Dorothy *by* Petune's Lad 13068.

2095 **V.** (**£3.**)—L. E. Tubbs, The Priory, Stevenage, for **Stevenage Starlight,** whole colour, born May 1; *s.* Bowlina's Bright Prince, *d.* Spring Starlight (Vol. 33, p. 433) *by* Prince Prudence 2nd 13389.

2087 **R. N.**—H. S. Mountain, Groombridge Place, Kent, for **Brampton Farm Bowlina.**

H. C.—2075, 2076, 2080, 2081. **C.**—2085, 2086, 2088.

Kerries.

N.B.—In the Kerry Classes, the number inserted within brackets after the name of an animal indicates the number of such animal in the Irish Kerry Herd Book. A number without brackets indicates that the animal is registered in the British Kerry Herd Book.

Class 227.—*Kerry Bulls, born in or before* 1923.

2097 **I.** (**£15, & Champion.**[1])—L. Currie, Minley Manor, Farnborough, Hants, for **Hattingley Arthur** 588, born Feb. 7, 1922, bred by Zambra and Williamson Milne, West Tisted, Ropley; *s.* Waterville Lord 424, *d.* Coquet Alice 1795 *by* Maeldum 223.

2101 **II.** (**£10.**)—The Kerry Estates, Ltd., The Warren House, Stanmore, Middlesex, for **Valencia Sammy** 670, born Feb. 25, 1923; *s.* Valencia Czar 534, *d.* Valencia Stella 3247 *by* Valencia Cupbearer (953).

2100 **III.** (**£5.**)—The Kerry Estates, Ltd., for **Raven of Carton** 661, born April 17, 1923, bred by the Duke of Leinster, Maynooth, Co. Kildare; *s.* Bushmount Rory 634, *d.* Delphinium 31st of Carton (4053) *by* Prince 6th of Carton (771).

2098 **R. N.**—The Elmhurst Farming and Trading Co., Ltd., Elmhurst Farm, Slinfold, Sussex, for **Valencia Perry.**

Class 228.—*Kerry Bulls, born in* 1924.

2104 **I.** (**£15.**)—Lady Fitzgerald, Buckland House, Faringdon, for **Buckland Duke** (Vol. 25, p. 23), born June 14; *s.* Buckland Viking 470, *d.* Buckland Strawberry 2104 *by* Raspberry Duke 331.

2106 **II.** (**£10.**)—Brig.-General G. Ll. Palmer, Berryfield, Bradford-on-Avon, for **Lanky King Cole** 651, born April 21; *s.* Valencia Linksman 496, *d.* Coquet Geranium 2246 *by* Coquet Duke 380.

2103 **III.** (**£5.**)—The Elmhurst Farming and Trading Co., Ltd., Elmhurst Farm, Slinfold, Sussex, for **Elmhurst Druid** 643, born May 8; *s.* Hattingley Buck 589, *d.* Vaddy Caerbeg 2nd 2496 *by* Vaddy Warre 419.

2105 **R. N.**—The Kerry Estates, Ltd., The Warren House, Stanmore, Middlesex, for **Valencia Master.**

Class 229.—*Kerry Cows (in-milk), born in or before* 1921.

2111 **I.** (**£15, & R. N. for Champion.**[1])—The Kerry Estates, Ltd., The Warren House, Stanmore, Middlesex, for **Valencia Eileen 3rd** 2798, born March 14, 1916, calved May 6, 1925, bred by the Knight of Kerry, Valencia Island, Kerry; *s.* Valencia Lord 1st (782), *d.* Valencia Eileen 2nd (3778) *by* Gort Prince (636).

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[1] Silver Challenge Cup, value Twenty-five Guineas, given by the British Kerry Cattle Society, for the best animal in Classes 227 to 231.

2113 **II.** (£10.)—Brig.-General G. Ll. Palmer, Berryfield, Bradford-on-Avon, for **Coquet Geranium** 2246, born April 22, 1917, calved April 27, 1925, bred by Captain J. L. Ames, Thistlehaugh, Longhorsley; *s.* Coquet Duke 380, *d.* Walton Lanky 2nd 1864 *by* Walton Diver 270.

2108 **III.** (£5.)—The Elmhurst Farming and Trading Co., Ltd., Elmhurst Farm, Slinfold, Sussex, for **Flora of Carton** 2373, born March 23, 1917, calved April 14, 1925, bred by the Duke of Leinster, Carton, Maynooth, Co. Kildare; *s.* Prince 6th of Carton (771), *d.* Pomegranate 2nd of Carton (3716) *by* Ormeau Laburnum (652).

2110 **R. N.**—The Kerry Estates, Ltd., for **Ruby of Carton.**

H. C.—2114.

Class 230.—*Kerry Heifers (in-milk), born in* 1922 *or* 1923.

2115 **I.** (£15.)—The Elmhurst Farming and Trading Co., Ltd., Elmhurst Farm, Slinfold, Sussex, for **Elmhurst Bubbles** 3371, born Nov. 18, 1922, calved May 17, 1925; *s.* O.P.H. Primrose Watersheen 446, *d.* Vaddy Caerbeg 2nd 2496 *by* Vaddy Warre 419.

2116 **II.** (£10.)—The Kerry Estates, Ltd., The Warren House, Stanmore, Middlesex, for **Moss Rose** 3631, born March 13, 1922, calved May 1, 1925, bred by G. Hume, Carton, Maynooth, Kildare; *s.* Valencia Harold 494, *d.* Delphinium 29th of Carton (3963) *by* Prince 6th of Carton (771).

2117 **III.** (£5.)—The Kerry Estates, Ltd., for **Muckross Agnes** 3633, born May 3, 1922, calved May 9, 1925, bred by A. R. Vincent, Muckross Abbey, Killarney; *s.* Muckross Playboy of the Western World 558, *d.* Duv Agnes (4322) *by* Duv Timothy (798).

2120 **R. N.**—Bertram W. A. Watney, Chaldon Mead, Caterham, for **Belinda of Warren.**

Class 231.—*Kerry Heifers (not in-milk), born in* 1923 *or* 1924.[1]

2121 **I.** (£15.)—L. Currie, Minley Manor, Farnborough, Hants, for **Minley Dorothy** (Vol. 24, p. 13), born March 23, 1923; *s.* Sloe Drop 415, *d.* Minley Midget 2445 *by* Valencia Lord 3rd 370.

2130 **II.** (£10.)—The Kerry Estates, Ltd., The Warren House, Stanmore, Middlesex, for **Duv Tereeta** 3561, born March 4, 1923, bred by John O'Neill, Chilton, Crosshouses, Shrewsbury; *s.* Duv Demon 640, *d.* Duv Tigress 3526 *by* Duv Tibber (785).

2127 **III.** (£5.)—Lady Fitzgerald, Buckland House, Faringdon, for **Minley Curley,** born May 7, 1924, bred by Lawrence Currie, Minley Manor, Farnborough; *s.* Minley Major 513, *d.* Minley Tabbie 1830 *by* Minley Rover 287.

2129 **IV.** (£4.)—C. P. Hunter, Redland House, Hough Green, Chester, for **Rhos Ucha Helpmate** 3724, born Jan. 6, 1924; *s.* College Pat 504, *d.* Derryquin Dewdrop 2955 *by* Black Prince of Claragh 539.

2122 **V.** (£3.)—The Elmhurst Farming and Trading Co., Ltd., Elmhurst Farm, Slinfold, Sussex, for **Elmhurst Dahlia** (Vol. 25, p. 21), born Feb. 25, 1924; *s.* O. P. H. Primrose Watersheen 446, *d.* Hattingley Hearty 2638 *by* Waterville Lord 424.

2131 **R. N.**—The Kerry Estates, Ltd., for **Valencia Ellen.**

H. C.—2132.

Dexters.

N.B.—In the Dexter Classes, the number inserted within brackets after the name of an animal indicates the number of such animal in the Irish Dexter Herd Book. A number without brackets indicates that the animal is registered in the English Dexter Herd Book.

Class 232.—*Dexter Bulls, born in or before* 1923.

2140 **I.** (£15, **R. N. for Champion,**[2] **& R.N. for Champion.**[3])—W. Lindsay Everard, M.P., Ratcliffe Hall, Leicester, for **Brokenhurst Philip** 726, born March 13, 1921, bred by Lady Kathleen Hare, Brokenhurst Park, Hants; *s.* Brokenhurst Morilla 651, *d.* Peach Blossom of Claragh 2535 *by* Gort Ned 5th 607.

2139 **II.** (£10.)—Mrs. C. M. L. Calvert, Banwell Castle, Banwell, Somerset, for **Wightwick Paul** 864, born June 6, 1922, bred by Sir Walter H. Evans, Bart., Wightwick Hall, Wolverhampton; *s.* Oakridge Pat 673, *d.* Oakridge Beryl 2055.

2143 **III.** (£5.)—Mrs. Ernest Johnson, Ashton Hayes, Chester, for **Grinstead Farrier** 787, born April 1, 1922, bred by Lady Loder, Leonardslee, Horsham; *s.* Brockhampton Monarch 693, *d.* Grinstead Flora 2767 *by* Braishfield Patrick 599.

2137 **IV.** (£4.)—Trustees of Arley Estate, Arley Hall, Northwich, Cheshire, for **Arley Ajax** 761, born June 15, 1922, bred by the Earl of Essex, Bodenham Manor, S.O., Herefordshire; *s.* Havering Tucker 739, *d.* Fillongley Flirt 2244 F.S.

2138 **R. N.**—Mrs. F. Atherton Brown, Bourton Hill House, Moreton-in-Marsh, for **Bourton Hill Joek.**

H.C.—2147. **C.**—2141.

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[1] Prizes, except Fourth and Fifth, given by the British Kerry Cattle Society.

[2] Silver Challenge Cup, value Twenty-five Guineas, given by the Dexter Cattle Society, for the best animal in Classes 232 to 236.

[3] Silver Challenge Breeders' Bowl, value Ten Guineas, given through the Dexter Cattle Society, for the best animal in Classes 232 to 236, which is already registered in the Dexter Herd Book, and is the progeny of sire and dam already registered.

Class 233.—*Dexter Bulls, born in* 1924.

2155 I. (£15.)—Alfred C. King, Braishfield Manor, Romsey, Hants, for **Braishfield Goodenough** (Vol. 25, p. 19), born May 29; *s.* La Mancha True Blue 703, *d.* La Mancha Goody 2268 F.S.

2153 II. (£10.)—Colonel W. O. Gibbs, Home Farm, Barrow Gurney, Somerset, for **Grinstead Wilfrid** (Vol. 25, p. 20), born May 18, bred by Lady Loder, Leonardslee, Horsham; *s.* Brokenhurst Penny 2nd 694, *d.* Grinstead Winifred 2953 *by* Braishfield Patrick 599.

2151 III. (£5.)—Mrs. E. Crawford, Thorpe Satchville Hall, Melton Mowbray, for **Thorpe Crusader** 897, born March 9; *s.* Brokenhurst Florian 724, *d.* Babs of Hookstiles 2683 F.S.

2154 IV. (£4.)—Lady Kathleen Hare, Brokenhurst Park, Brockenhurst, Hants, for **Brokenhurst Pip** 878, born May 14; *s.* Oakridge Budget 750, *d.* Peach Blossom of Claragh 2535 *by* Gort Ned 5th (607).

2150 R. N.—Miss Dora Box, The Hawthorns, Wheaton Aston, Stafford, for **Wightwick Punch.**
H. C.—2149. C.—2148.

Class 234.—*Dexter Cows (in-milk), born in or before* 1921.

2172 I. (£15.)—Colonel W. O. Gibbs, Home Farm, Barrow Gurney, Somerset, for **Barrow Dora 4th** 2827, born May 28, 1919, calved Feb. 11, 1925, bred by H. M. Gibbs, Barrow Court, Flax Bourton, Somerset; *s.* Barrow Beau 3rd 622, *d.* Barrow Dora 2nd 2573 *by* Oakridge Marston Jack 512.

2167 II. (£10.)—W. Lindsay Everard, M.P., Ratcliffe Hall, Leicester, for **Fillongley Forest Fawn** 2756, born July 19, 1919, calved May 19, 1925, bred by Mrs. H. J. Nutt, Ratcliffe-on-Wreke, Leicester; *s.* Fillongley Forester 630, *d.* Who's Who 2540 *by* Barrow Orphan 498.

2168 III. (£5.)—W. Lindsay Everard, M.P., for **Fillongley Forest Flower** 3143, born Sept. 9, 1920, calved May 19, 1925, bred by Mrs. H. J. Nutt, Ratcliffe-on-Wreake, Leicester; *s.* Fillongley Forester 630, *d.* Fillongley Freesia 2491 F.S.

2180 IV. (£4.)—Theo. A. Stephens, Frensham Manor, Farnham, Surrey, for **Venus of Hookstile** 3041 F.S., born May 2, 1919, calved May 8, 1925.

2170 V. (£3.)—W. Lindsay Everard, M.P., for **Pulcinella 10th** 2797, born June 27, 1919, calved April 19, 1925, bred by E. P. Peyton, The Rock, Leek-Wootton; *s.* Brokenhurst Coy Boy 539, *d.* Pulcinella 2nd 2201 *by* Paganini 532.

2173 R. N.—Lady Kathleen Hare, Brokenhurst Park, Brockenhurst, for **Brokenhurst Peach.**
H. C.—2171. C.—2178.

Class 235.—*Dexter Heifers (in-milk), born in* 1922 *or* 1923.

2187 I. (£15, **Champion,**[1] **& Champion.**[2])—Arnold H. Miller, Woodlands, Norwich, for **Woodland Ranunculus** (Vol. 24, p. 137), born Feb. 15, 1923, calved May 23, 1925; *s.* Brokenhurst Rufus 2nd 695, *d.* Fryerning Buttercup 2nd 2177 *by* Fryerning Snowstorm 501.

2186 II. (£10.)—Alfred C. King, Braishfield Manor, Romsey, Hants, for **Braishfield Petunia** 3410, born Aug. 13, 1923, calved May 22, 1925; *s.* La Mancha True Blue 703, *d.* Castlelough Patricia 2232 *by* Plantol 564.

2182 III. (£5.)—Miss Dora Box, The Hawthorns, Wheaton Aston, Stafford, for **Wightwick Dora 2nd** (Vol. 23, p. 154), born Dec. 24, 1922, calved March 31, 1925; *s.* Fillongley Forest Fiend 784, *d.* Wightwick Dora 3206 *by* Oakridge Pat 672.

2185 R. N.—Mrs. Ernest Johnson, Ashton Hayes, Chester, for **Bourton Hill Gipsy Love.**
H. C.—2183. C.—2189.

Class 236.—*Dexter Heifers (not in-milk), born in* 1923 *or* 1924.[3]

2195 I. (£15.)—W. Lindsay Everard, M.P., Ratcliffe Hall, Leicester, for **Ratcliffe Aileen** 3359, born June 24, 1923; *s.* Oakridge Budget 750, *d.* Brokenhurst Pansy 2871 *by* Brokenhurst Morilla 651.

2193 II. (£10.)—Mrs. C. M. L. Calvert, Banwell Castle, Banwell, Somerset, for **Banwell Gladiolus** (Vol. 25, p. 12), born July 20, 1924; *s.* Wightwick Paul 864, *d.* Maynards Gladiolus 3330 *by* Bagendon Nonsuch 687.

2204 III. (£5.)—Arnold H. Miller, Woodlands, Norwich, for **Woodland Fidelity** (Vol. 25, p. 24), born May 5, 1924; *s.* Grinstead Toreador 789, *d.* Woodland Friendship 3524 *by* Fillongley Falcon 656.

2200 IV. (£4.)—Lady Kathleen Hare, Brokenhurst Park, Brockenhurst, Hants, for **Brokenhurst Peach Bloom 2nd** 3245, born May 9, 1923; *s.* Oakridge Budget 750, *d.* Brokenhurst Peach Bloom 2707 *by* Brokenhurst Morilla 651.

2206 V. (£3.)—Theo. A. Stephens, Frensham Manor, Farnham, Surrey, for **Hookstile Valeria** (Vol. 25, p. 28), born May 18, 1924; *s.* Hever Rex 741, *d.* Venus of Hookstile 3401 F.S.

2190 R. N.—Mrs. F. Atherton Brown, Bourton Hill House, Moreton-in-Marsh, for **Bourton Hill Granny.**
H. C.—2191. C.—2192.

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[1] Silver Challenge Cup, value Twenty-five Guineas, given by the Dexter Cattle Society, for the best animal in Classes 232 to 236.

[2] Silver Challange Breeders' Bowl, value Ten Guineas, given through the Dexter Cattle Society, for the best animal in Classes 232 to 236, which is already registered in the Dexter Herd Book, and is the progeny of sire and dam already registered.

[3] Prizes, except Fourth and Fifth, given by the Dexter Cattle Society.

Dairy Cattle.[1]

SHORTHORN OR OF SHORTHORN TYPE.

The property of residents within the radius of the Cheshire Agricultural Society.

Class 237.—*Dairy Cows (in-milk), the property of bona-fide farmers.*

2207 I. (£10.)—A. Broome & Sons, Preston Brook, Warrington, for **Dossel.**
2208 II. (£6.)—John Ford, Bears Head Farm, Smallwood, Sandbach, for **Dairy Lass.**
2211 III. (£3.)—Thomas Warburton, Hall Lane Farm, Daresbury, Warrington, for **Dairymaid.**
2209 IV. (£1.)—John Kitchen, Spring Bank Farm, Over, Winsford, for **Beauty.**
2210 R. N.—Charles Ryder, Bettington Farm, Tattenhall, for **Laurestina Rosebud.**

Class 238.—*Dairy Cows (in-calf), to calve within 3 months of the Show, the property of bona-fide farmers.*

2214 I. (£10.)—John Ford, Bears Head Farm, Smallwood, Sandbach, for **Phyllis.**
2216 II. (£6.)—Thomas Warburton, Hill Lane Farm, Daresbury, Warrington, for **Beauty.**
2213 III. (£3.)—John Ford, for **Faithful.**
2218 IV. (£1.)—James Wild, jun., Grotto Farm, Over Peover, Knutsford, for **Sparkling Princess.**
2212 R. N.—A. Broome & Sons, Preston Brook, Warrington, for **Edna.**

Class 239.—*Recorded Dairy Cows (in-milk), the property of members of a Milk Recording Society.*

2219 I. (£10.)—James Wild, jun., Grotto Farm, Over Peover, Knutsford, for **Mungrisdale Peavel** (P 2545), born July 15, 1918, bred by F. Taylor, Beckside, Mungrisdale, Penrith.

Class 240.—*Recorded Dairy Cows (in-calf), to calve within 3 months of the Show, the property of members of a Milk Recording Society.*

2223 I. (£10.)—James Wild, jun., Grotto Farm, Over Peover, Knutsford, for **Queenie 2nd** (G 3898).
2220 II. (£6.)—A. Broome & Sons, Preston Brook, Warrington, for **Ida** (G 1601).
2222 III. (£3.)—H. P. Mortimer, Kingsley Windmill, by Warrington, for **Moonlight** (G 3282).
2221 IV. (£1.)—H. P. Mortimer, for **Kingsley Lady** (G 3591).

Milk Yield Classes.

Class 241.—*Dairy Shorthorn Cows or Heifers.*

1324 I. (£15.)—Maurice & Ashton, Manton Grange, Marlborough and Scotsgrove, Thame, for **Preshute Pandora** (Vol. 64, p. 1106), red, born Oct. 3, 1917, calved May 26, 1925, bred by C. J. K. Maurice, Manton Grange; *s.* Knowsley Precentor 126368, *d.* Timbrel 21st *by* Kingsthorpe Joe 112216.
1348 II. (£10.)—Mrs. E. M. Fitz Hugh, Plas Power, Wrexham, for **Rosette Prim 4th** 8217, red and little white, born Feb. 17, 1919, calved June 17, 1925, bred by W. Taylor, Sykeside, Soulby; *s.* Royal Stockman 145183, *d.* Rosette Prim *by* Marmion Robin 112446.
1338 III. (£5.)—Captain Arnold S. Wills, Thornby Hall, Northampton, for **Thornby Foggathorpe 2nd** (Vol. 61, p. 1114), white, born Sept. 11, 1914, calved June 6, 1925; *s.* Dreadnought 102049, *d.* Dolphinlee Foggathorpe 3rd *by* Lancaster Victor 99312.
1360 IV. (£4.)—Major S. P. Yates, for **Sorbrook Foggathorpe.** (See Class 164.)
1339 V. (£3.)—Captain Arnold S. Wills, for **Thornby Foggathorpe 7th** (Vol. 64, p. 1391), white, born June 3, 1917, calved June 12, 1925; *s.* Drusus 115142, *d.* Thornby Foggathorpe 2nd *by* Dreadnought 102049.
H. C.—1317, 1326, 1329, 1336, 1355, 1367.

Class 242.—*Non-Pedigree Dairy Shorthorn Cows or Heifers.*

1422 I. (£15.)—H. A. Brown, for **Isabelle.** (See Class 167.)
1423 II. (£10.)—H. P. Mortimer, for **Lady Graceful.** (See Class 167.)

Class 243.—*Lincolnshire Red Shorthorn Cows or Heifers.*

1438 I. (£15.)—John Evens & Son, for **Burton Opal 2nd.** (See Class 172.)
1448 II. (£10.)—John Evens & Son, for **Burton Cherry 4th.** (See Class 173.)
1452 III. (£5.)—Lieut.-Colonel Sir A. G. Weigall, K.C.M.G., Petwood, Woodhall Spa, for **Langford Polly 5th** (Vol. 21, p. 336), born in Sept., 1914, calved May 28, 1925, bred by Reading & Sons, Rectory Farm, Langford, Lechlade; *s.* Burton Gay Boy 8842, *d.* Langford Polly 3rd *by* Burton Langford 7404.
1444 IV. (£4.)—Benjamin George Bowser, Scothern Manor, Lincoln, for **Scothern Flower** (Vol. 29, p. 283), born Oct. 16, 1919, calved May 9, 1925; *s.* William of Hallington 10362, *d. by* Scampton King Hal 7119.
H. C.—1449, 1451.

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[1] Prizes given by the Chester Local Committee.

Class 245.—*South Devon Cows or Heifers.*

1503 **I.** (£15.)—Walter Hunt, Tracey's Farm, Berry Pomeroy, Totnes, for **Milkmaid 9th** 16797, born Sept. 2, 1916, calved April 13, 1925, bred by W. S. Harris, Aish Farm, Stoke Gabriel, Totnes; *s.* Well Champion 5210, *d.* Milkmaid 4th 11644 *by* Dahlia Hero 2687.

1504 **II.** (£10.)—Walter Hunt, for **Milkmaid 10th.** (See Class 184.)

Class 246.—*Red Poll Cows or Heifers.*

1567 **I.** (£15.)—Major J. A. Morrison, D.S.O., for **Sudbourne Comfit.** (See Class 190.)

1568 **II.** (£10.)—Walter Scrimgeour, for **Tendring Floss 29th.** (See Class 190.)

1557 **III.** (£5.)—Viscount Folkestone, Longford Castle, Salisbury, for **Longford Ruby,** born Aug. 19, 1915, calved April 25, 1925, bred by the Earl of Radnor, Longford Castle; *s.* Longford King 16762, *d.* Longford Diamond 22172 *by* Demon 9789.

1565 **IV.** (£4.)—Major J. A. Morrison, D.S.O., for **Basildon Clara** 28489, born April 3, 1920, calved June 21, 1925; *s.* Sudbourne Miner 11492, *d.* Brightwell Clinker 23906 *by* Sir David 10363.

H. C.—1556, 1566.

Class 247.—*Blue Albion Cows or Heifers.*

1646 **I.** (£15.)—T. H. Swire & Sons, Bellaport and Mount Farms, Market Drayton, for **Mount Kitty,** born in 1918, calved June 5, 1925, bred by W. H. Hobson, Woodhey Hall, Nantwich.

1645 **II.** (£10.)—John D. Seals, Home Farm, Snelston, Ashbourne, for **Pike Kate** 6024, calved June 20, 1925, breeder and age unknown.

Class 248.—*British Friesian Cows or Heifers.*

1767 **I.** (£15, & **Champion.**[1])—Bertram Parkinson, Creskeld Hall, Arthington, Leeds, for **Thurston Karels Emily** 49386, born Dec. 5, 1920, calved June 17, 1925, bred by G. T. Eaton, Thurston Hall, Framfield; *s.* Kirkhill (imp.) Karel 2nd 4051, *d.* Hedges Lady Murray 15010 *by* Hedges Squire 313.

1772 **II.** (£10, & **R. N. for Champion.**[1])—Friend Sykes, Richings Park, Colnbrook, Bucks, for **Kingswood Ceres Daisy** 39928, born Nov. 21, 1919, calved Feb. 5, 1925, bred by Horace Hale, Kingswood, Tandridge; *s.* Hedges Second Series 6427 P.T., *d.* Brookside Hawkrigg Daisy 20342 *by* Brookside Buttercup's Boy 1015.

1753 **III.** (£5.)—G. Holt Thomas, Northdean House, Hughenden, High Wycombe, for **Colton Sunray** 32650, born Oct. 31, 1918, calved March 19, 1925, bred by Hugh Brown, Colton Mains, Dunfermline; *s.* Terling (imp.) Vic Bertus 4541, *d.* Colton Sunset 6868 *by* Colton Puritan 95.

1774 **IV.** (£4.)—W. and R. Wallace, Swangleys Farm, Knebworth Station, Herts, for **Bladen Katy Did** 37254, born Feb. 19, 1919, calved June 22, 1925, bred by E. R. Debenham, Briantspuddle, Dorchester; *s.* Bladen Garnet 5895, *d.* Woodcote Dragonfly 16642 *by* Woodcote Andrew 855.

1750 **V.** (£3.)—Ernest B. Hall, Hales Hall, Hales, Market Drayton, for **Hales** (imp. 1922) **Rika** 62056, born March 29, 1921, calved Feb. 28, 1925, bred by Peploe Brothers, Molteno, Cape Providence; *s.* Kopjeskraal Marthus 3rd 2100 S.A.S.B., *d.* Negerin 1067 S.A.S.B. *by* Ideaal 4793 F.R.S.

H. C.—1756, 1762.

Class 249.—*Ayrshire Cows or Heifers.*

1885 **I.** (£15.)—A. W. Montgomerie, Lessnessock, Ochiltree, for **Beuchan Rosie 5th** 56787 born Oct. 24, 1917, calved June 16, 1925, bred by the Misses Allan, Beuchan, Thornhill; *s.* Holehouse Sunrise 11044, *d.* Beuchan Rosie 2nd 36123 *by* Beuchan Golden Gift 9561.

1881 **II.** (£10.)—James Howie, for **Friendlesshead Blossom 4th.** (See Class 211A.)

1879 **III.** (£5.)—Major C. Randolph Dudgeon, Cargen Holm, Dumfries, for **Cargen Holm Miss Robb 7th** 73730, born March 29, 1918, calved June 6, 1925; *s.* Dalfibble Masterpiece 10256, *d.* Cargen Holm Miss Robb 3rd 42507 *by* Auchenbrain Drummie 6196.

H.C.—1878.

Class 250.—*Guernsey Cows or Heifers.*

1935 **I.** (£15.)—Walter Dunkels, for **Starlight Broom.** (See Class 216.)

1939 **II.** (£10.)—Mrs. J. E. Kirby, Manor House, Redbridge, Southampton, for **Dawn of Meadow View** 17566, fawn and white, born Nov. 28, 1920, calved June 10, 1925, bred by F. Browning, Norgiots, St. Andrews, Guernsey; *s.* Cyrene's Lad of the Rouvets 4252 P.S., R.G.A.S., *d.* Goldena of the Norgiots 14843 P.S., R.G.A.S. *by* Vivandier 3290 P.S., R.G.A.S.

1944 **III.** (£5.)—Sir James Remnant, Bart., M.P., for **Dene Lady Hester.** (See Class 216.)

1946 **IV.** (£4.)—Samuel Semmens, for **Trevarthian Favourite.** (See Class 216.)

1937 **V.** (£3.)—Mrs. J. E. Ellis, for **Rowanberry 31st.** (See Class 216.)

H. C.—1930, 1932, 1950, 1962.

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[1] Champion Prize of £30, with £5 to the Reserve Number, given by a Society interested in the production of milk, for the Cows obtaining the highest number of points in the Dairy Shorthorn, Lincolnshire Red Shorthorn, Devon, South Devon, Red Poll, Blue Albion, and British Friesian Milk Yield Competitions.

Class 251.—*Jersey Cows or Heifers.*

2037 **I. (£15, Champion,[1] & Special.[2])**—F. B. Imbert-Terry, Blue Hayes, Broad Clyst, Devon for **Blue Hayes Sporran** (Vol. 32, p. 280), whole colour, born Dec. 16, 1917, calved Feb. 13, 1925; *s.* Hotspur 12657, *d.* Blue Hayes Scottie *by* Simpkins Chief 10446.

2031 **II. (£10, & R. N. for Champion.[1])**—Mrs. Evelyn, Wotton House, Dorking, for **Fairlawne Hussy** (Vol. 30, p. 273), broken colour, born Aug. 8, 1916, calved Feb. 4, 1925, bred by W. M. Cazalet, Fairlawne, Tonbridge; *s.* Sir Toby 12154, *d.* Hussy 13th (imp.) *by* MacDougal 9333.

2050 **III. (£5.)**—Grosvenor Berry, for **Postmistress.** (See Class 224.)

2046 **IV. (4.)**—R. Bruce Ward, Godinton, Ashford, Kent, for **Pirouette** (Vol. 34, p. 407), whole colour, born April 3, 1920, calved May 19, 1925; *s.* Prometheus 13391, *d.* Caper *by* Capsicum 10892.

2047 **V. (£3.)**—R. Bruce Ward, for **Privet** (Vol. 34, p. 413), whole colour, born May 3, 1920, calved March 17, 1925; *s.* Prometheus 13391, *d.* Evergreen *by* Catillon's Prince 11639.

H. C.—2030, 2035, 2045, 2053, 2071.

Class 252.—*Kerry Cows or Heifers.*

2111 **I. (£15, Champion,[3] & Champion.[4])**—The Kerry Estates, Ltd., for **Valencia Eileen 3rd.** (See Class 229.)

2108 **II. (£10, R. N. for Champion,[3] & R.N. for Champion.[4])**—The Elmhurst Farming and Trading Co., Ltd., for **Flora of Carton.** (See Class 229.)

2112 **III. (£5.)**—The Kerry Estates, Ltd., for **Valencia Sunflower** 2804, born March 18, 1921, calved May 10, 1925, bred by the Knight of Kerry, Valencia Island; *s.* Czar of Carton (506), *d.* Sheen 16th (2756) *by* Kilmorna Lord 6th (698).

H. C.—2110, 2113.

Class 253.—*Dexter Cows or Heifers.*

2163 **I. (£15.)**—Mrs. F. Atherton Brown, Bourton Hill House, Moreton-in-Marsh, for **Bourton Hill Scarlet Pimpernel** 3067, born in 1920, calved March 26, 1925, breeder unknown.

2159 **II. (£10.)**—The Trustees of the Arley Estate, Arley Hall, Northwich, for **Fillongley Flotsam** 3292, born May 28, 1920, calved May 22, 1925, bred by Mrs. H. J. Nutt, Ratcliffe-on-Wreake, Leicester; *s.* Oakridge Scout 674, *d.* Fillongley Fathom 2414 F.S.

2180 **III. (£5.)**—The Rev. R. Lingard Simkin, for **Oakridge Emerald 3rd.** (See Class 234.)

2179 **IV. (£4.)**—Mrs. C. L. Pickard, The Grey House, Forton, Garstang, for **Quernmore Princess** 3018, born June 20, 1921, calved April 19, 1925; *s.* Brokenhurst Cherry Ripe 647, *d.* Gort Primula 7th 2627 *by* Gort Ned 5th 631.

2171 **V. (£3.)**—Colonel W. O. Gibbs, Home Farm, Barrow Gurney, Somerset, for **Barrow Bee 6th** 3387, born June 23, 1921, calved May 23, 1925, bred by G. M. Gibbs, Gratwicke Hall, Flax Bourton; *s.* Oakridge Satrap 593, *d.* Barrow Bee 2nd 1826 *by* Barrow Captain 393.

H. C.—2168.

Butter Tests.

Class 254a.—*Cows, exceeding* 900 *lb. live weight.*

2037 **I. (£15, & G.M.[5])**—F. B. Imbert-Terry, for **Blue Hayes Sporran.** (See Class 251).

2031 **II. (£10, & S.M.[5])**—Mrs. Evelyn, for **Fairlawne Hussy.** (See Class 251.)

1772 **III. (£5.)**—Friend Sykes, for **Kingswood Ceres Daisy.** (See Class 248.)

1338 **IV. (£4.)**—Captain Arnold S. Wills, for **Thornby Foggathorpe 2nd.** (See Class 241.)

1646 **V. (£3.)**—T. H. Swire & Sons, for **Mount Kitty.** (See Class 247.)

H. C.—1324, 1326, 1336, 1348, 1360, 1383, 1448, 1451, 1452, 1503, 1504, 1567, 1568, 1636, 1750.

2046 **Certificate of Merit.[6]**—R. Bruce Ward, for **Pirouette.**

2054 **Certificate of Merit.[6]**—C. J. Phillips, for **Fly's Sweetheart,**

Class 254b.—*Cows, not exceeding* 900 *lb. live weight.*

2050 **I. (£15, & B.M.[5])**—Grosvenor Berry, for **Postmistress.** (See Class 224.)

1939 **II. (£10.)**—Mrs. J. E. Kirby, for **Dawn of Meadow View.** (See Class 250.)

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[1] Champion Prize of £20, with £5 to the Reserve Number, given by a Society interested in the production of milk, for the Cows obtaining the highest number of points in the Ayrshire, Guernsey and Jersey Milk Yield Competitions.

[2] Special Prize of £10 10*s.*, given by the Royal Jersey Agricultural Society, for the Jersey Cow obtaining the greatest number of points in Class 251.

[3] Champion Prize of £10, with £5 to the Reserve Number, given by a Society interested in the production of milk, for the Cows obtaining the highest number of points in the Kerry and Dexter Milk Yield Competitions.

[4] The "Elmhurst" Perpetual Silver Challenge Cup, value Fifty Guineas, given by the British Kerry Cattle Society, for the Kerry Cow in Class 252 gaining the highest number of points.

[5] Gold Medal, Silver Medal, and Bronze Medal, given by the English Jersey Cattle Society, for the three Jersey Cows obtaining the greatest number of points in the Butter Tests.

[6] Certificate of Merit, given by the English Jersey Cattle Society, for Jersey Cows, not being Prize Winners, obtaining the following points: Cows four years old and under, 30 points; Cows over four years old, 35 points.

2047 **III. (£5.)**—R. BRUCE WARD, for **Privet.** (See Class 251.)

2044 **IV. (£4.)**—L. E. TUBBS, The Priory, Stevenage, Herts, for **Queen Elizabeth** (Vol. 30, p. 360), whole colour, born Jan. 12, 1916, calved March 15, 1925, bred by D. A. Bevan, Royston; *s.* Redstreak 12122, *d.* Regina *by* Fox's King 7505.

2045 **V. (£3.)**—R. BRUCE WARD, for **Miranda's Lass.** (See Class 223.)

2053 **Certificate of Merit.**[1]—COLONEL L. G. GISBORNE, C.M.G., for **Cid's Raleigh Spectre.**

GOATS.[2]

Class 255.—*Toggenburg or British Toggenburg Female Goats (in-milk), any age.*

2226 **I. (£5, & Champion.[3])**—MRS. JOHN C. STRAKER, Stagshaw House, Corbridge, for **Leazes Hackee** 443, born Feb. 15, 1920, kidded Jan. 6, 1925; *s.* Brendon Friday 349, *d.* Leazes Hackberry 304 *by* Copthorne Billiken 274.

2224 **II. (£3.)**—MISS ALEXANDER, Byards Lodge, Knaresborough, for **Stockwell Corcopois** 551, born June 29, 1923, kidded May 6, 1925; *s.* Edel 524, *d.* Korea 518.

2227 **III. (£2.)**—MRS. A. M. TAYLOR, Grey Friars House, Chester, for **Feltham Merrymaid** 5435, born April 18, 1922, kidded April 1, 1924, bred by E. A. Walmsley, Mattingley Green, Hartley Wintney, Hants; *s.* Hamestall Provost Marshal 3870, *d.* Feltham Marigold 3066 *by* Leazes Lucky Halton 2578.

2225 **R. N.**—MISS MARJORIE HENDERSON, The Riding, Hexham, for **Sandhill Gassy.**

Class 256.—*Saanen or British Saanen Female Goats (in-milk), any age.*

2229 **I. (£5.)**—MRS. ARTHUR ABBEY, Didgemere Hall, Roydon, Essex, for **Didgemere Deutchia** 5957, born March 31, 1923, kidded April 27, 1925; *s.* Didgemere Duncan 5556, *d.* Piper of Bashley 4504 *by* Edenstead Pluck 3007.

2235 **II. (£3.)**—MRS. JOHN C. STRAKER, Stagshaw House, Corbridge, for **Leazes Fibarena** 5941, born May 1, 1923, kidded Sept. 4, 1924; s. Shawbarena 31, *d.* Leazes Fidelia 4425 *by* Leazes Harvest 388.

Class 257.—*Anglo-Nubian Female Goats (in-milk), any age.*

2237 **I. (£5, & Champion.[4])**—MISS K. PELLY, Theydon Place, Epping, for **Nash Bellona** 1275, born March 25, 1920, kidded March 24, 1925, bred by W. Horne, Nash Court, Westwell, Kent; *s.* Edenbreck Danans 843, *d.* Nash Bella 1112 *by* Edenbreck Midas 740.

2238 **II. (£3.)**—MISS K. PELLY, for **Theydon Belladonna** 1512, born Sept. 13, 1922, kidded May 14, 1925; *s.* Theydon Marconi 1138, *d.* Nash Bella 1112 *by* Edenbreck Midas 740.

2239 **III. (£2.)**—MISS K. PELLY, for **Theydon Almond** 1444, born Feb. 26, 1922, kidded Feb. 18, 1925; *s.* Edenbreck Klito 947, *d.* Regius Aganippe 895 *by* Wigmore Norman 562.

2241 **R. N.**—MRS. C. L. PICKARD, The Grey House, Forton, Garstang, for **Edenbreck Thora.**

Class 258.—*British Alpine Female Goats (in-milk), any age.*

2243 **I. (£5, Champion,[5] & Champion.[6])**—MRS. ARTHUR ABBEY, Didgemere Hall, Roydon, Essex, for **Didgemere Dawdler** 5075, born June 1, 1921, kidded Jan. 23, 1925; *s.* Prophet of Bashley 3775, *d.* Preference 2779 *by* Leazes Lucky Halton 2575.

2245 **II. (£3, & Champion.[7])**—MRS. ARTHUR ABBEY, for **Didgemere Dream** 5965, born Feb. 17, 1923, kidded May 19, 1925; *s.* Prophet of Bashley 3775, *d.* Withdean Countess 2855 *by* Leazes Lucky Halton 2575.

2246 **III. (£2.)**—MRS. ARTHUR ABBEY, for **Didgemere Dusky** 5083, born May 6, 1921, kidded March 14, 1925; *s.* Prophet of Bashley 3775, *d.* Ira Starry 4384 *by* Edenstead Cactus 2382.

2244 **R. N.**—MRS. ARTHUR ABBEY, for **Didgemere Delilah.**

C.—2248.

Class 259.—*Female Goats (in-milk), any age, any other variety, not eligible for Classes 255 to 258.*

2251 **I. (£5.)**—MRS. MORCOM, The Clock House, Bromsgrove, for **Leazes Fortitude** 3710 (Anglo-Swiss), born March 4, 1919, kidded March 12, 1925, bred by Mrs. Straker, Hexham; *s.* Leazes Heydon 3265, *d.* Leazes Lady Fortune 2173 *by* Broxbourne Adveral 1947.

2250 **II. (£3.)**—MISS MARJORIE HENDERSON, The Riding, Hexham, for **Riding Topaz** 5816 (Anglo-Nubian Swiss), born Feb. 18, 1925, kidded April 12, 1925; *s.* Dochfour Onyx 4665, *d.* Riding Tulip 3730 *by* Mayfield Tipperary 2418.

2252 **III. (£2.)**—MRS. ROSE EDITH WROUGHTON, Furringdons, Merriott, Somerset, for **South Petherton Friesian** 5775 (Anglo-Nubian Swiss), born Jan. 29, 1923, kidded May 13, 1925; *s.* Jan. of Trenance 5213, *d.* South Petherton Frivol 7264 *by* Proud 2853.

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[1] Certificate of Merit, given by the English Jersey Cattle Society, for Jersey Cows, not being Prize Winners, obtaining the following points: Cows four years old and under, 30 points; Cows over four years old, 35 points.

[2] £30 towards these Prizes were given by the British Goat Society.

[3] Breed Challenge Certificate, given by the British Goat Society, for the best Toggenburg Female Goat, over 2 years old.

[4] Breed Challenge Certificate, given by the British Goat Society, for the best Anglo-Nubian Female Goat, over 2 years old.

[5] Challenge Certificate, given by the British Goat Society, for the best Female Goat, over 2 years old, that has borne a kid.

[6] Bronze Medal, given by the British Goat Society, for the best Female Goat.

[7] Challenge Certificate given by the British Goat Society, for the best Dual Purpose Goat.

Class 260.—*Toggenburg, British Toggenburg, Saanen or British Saanen Goatlings, over* 1 *but not exceeding* 2 *years old.*

2253 I. (£5.)—Mrs. Arthur Abbey, Didgemere Hall, Roydon, Essex, for **Didgemere Deborah** 6407 (British Toggenburg), born Feb. 28, 1924; *s.* Didgemere Duncan 5556, *d.* Didgemere Doughnut 5081 *by* Prophet of Bashley 3775.

2260 II. (£3.)—Mrs. Percy Wainwright, Sheepwalks, Castleford, Yorks, for **Fryston Stella** 572 (Toggenburg), born March 7, 1924; *s.* Edel (imp.) 524, *d.* Riding Cornflower 2nd 401 *by* Brendon Friday 349.

2256 III. (£2.)—Miss Marjorie Henderson, The Riding, Hexham, for **Ridgeway Roemeria** 6532 (British Toggenburg), born Feb. 26, 1924, bred by Mrs. Maurice, Duckholt Farm, Edenbridge; *s.* Ridgeway Ranunculus 5528, *d.* Spring Flower 4342.

2259 R. N.—Miss K. Pelly, Theydon Place, Epping, for **Wendy of Westons.**

Class 261.—*Anglo-Nubian Goatlings, over* 1 *but not exceeding* 2 *years old.*

2263 I. (£5.)—Miss K. Pelly, Theydon Place, Epping, for **Theydon Butterfly** 1615, born March 10, 1924; *s.* Sadberge Marcus Coriolanus 1003, *d.* Theydon Babette 1436 *by* Theydon Angus 1136.

2262 II. (£3.)—Miss K. Pelly, for **Theydon Beryl** 1611, born March 30, 1924; *s.* Sadberge Marcus Coriolanus 1003, *d.* Nash Bellona 1275 *by* Edenbreck Danaus 843.

2264 III. (£2.)—Miss K. Pelly, for **Theydon Bunty** 1614, born March 10, 1924; *s.* Sadberge Marcus Coriolanus 1003, *d.* Theydon Babette 1436 *by* Theydon Angus 1436.

2261 R. N.—R. Franklin-Hindle, Alport Lodge, Bromborough, Cheshire, for **Mersey Rose.**

Class 262.—*Goatlings, any other variety, over* 1 *but not exceeding* 2 *years old, not eligible for Classes* 260 *and* 261.

2266 I. (£5, & Champion.[1])—Mrs. Arthur Abbey, Didgemere Hall, Roydon, Essex, for **Didgemere Design** 6411 (British Alpine), born March 3, 1924; *s.* Didgemere Daniel 5955, *d.* Withdean Countess 2855 *by* Leazes Lucky Halton 2575.

2265 II. (£3.)—Mrs. Arthur Abbey, for **Didgemere Dorothy** 6414 (British Alpine), born Feb. 2, 1924; *s.* Didgemere Daniel 5955, *d.* Didgemere Dianthus 5438 *by* Prophet of Bashley 3775.

2268 III. (£2.)—Mrs. Rose Edith Wroughton, Furringdons, Merriott, Somerset, for **Heddon Spinetta** 6437 (Anglo-Swiss), born May 7, 1924, bred by Miss E. Skidmore, Ashley Leigh, Box, Wilts; *s.* Schnaffs 34, *d.* Cerese.

Class 263.—*Female Kids, any variety, not over* 1 *year old.*

2269 I. (£5.)—Mrs. Arthur Abbey, Didgemere Hall, Roydon, Essex, for **Didgemere Donah** 6825 (British Alpine), born July 12, 1924; *s.* Didgemere Daniel 5955, *d.* Didgemere Dough 5963 *by* Didgemere Duncan 5556.

2270 II. (£3.)—Mrs. Arthur Abbey, for **Didgemere Desire** 6826 (British Alpine), born July 16, 1924; *s.* Didgemere Daniel 5955, *d.* Didgemere Decimal 5486 *by* Prophet of Bashley 3775.

2279 III. (£2.)—Mrs. R. Edith Wroughton, Furringdons, Merriott, Somerset, for **South Petherton Lucy** (Anglo-Swiss), born April 1, 1925, bred by Miss Ransford, Pensford, Bristol; *s.* Druid, *d.* Tarbert Coquette *by* Proud 2853.

2271 IV. (£1.)—Miss Alexander, Byards Lodge, Knaresborough, for **Stockwell Tyclette** (Anglo-Nubian Swiss), born Feb. 22, 1925; *s.* Widbury Sultan 5381, *d.* Stockwell Tyke 17 *by* Stockwell Grange 4566.

2278 R. N.—Mrs. Percy Wainwright, Sheepwalks, Castleford, Yorks, for **Fryston Salome.**

H. C.—2273, 2274, 2277. C.—2275, 2276.

Milk Yield Class.

Class 264.—*Milk Yield Class, Quality, open to animals entered in Classes* 255 *to* 259.

2245 I. (£5, & Champion.[2])—Mrs. Arthur Abbey, for **Didgemere Dream.** (See Class 258.)

2246 II. (£3, & R. N. for Champion.[2])—Mrs. Arthur Abbey, for **Didgemere Dusky.** (See Class 258.)

2244 III. (£2.)—Mrs. Arthur Abbey, for **Didgemere Delilah** 5553, born March 19, 1922, kidded Feb. 24, 1925; *s.* Prophet of Bashley 3775, *d.* Tremedda Lidia 3555 *by* Copthorne Star 3120.

2229 IV. (£1.)—Mrs. Arthur Abbey, for **Didgemere Deutchia.** (See Class 256.)

2243 V. (10s.)—Mrs. Arthur Abbey, for **Didgemere Dawdler.** (See Class 258.)

2235 R. N.—Mrs. John C. Straker, for **Leazes Fibarena.**

H. C.—2237, 2238, 2248.

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[1] Bronze Medal, given by the British Goat Society, for the best Goatling.

[2] The "Dewar" Twenty-Guinea Challenge Trophy, given through the British Goat Society, for the Goat entered in either the General or the Toggenburg section of the Society's Herd Book winning the highest number of points in the Milking Classes.

2238 **Cup.**[1]—Miss K. Pelly, for **Theydon Belladonna.** (See Class 257.)
2237 **R. N. for Cup.**[1]—Miss K. Pelly, for **Nash Bellona.** (See Class 257.)
2246 & 2266 **Cup.**[2]—Mrs. Arthur Abbey, for **Didgemere Dusky** and **Didgemere Design.**
2244 & 2253 **R. N. for Cup.**[2]—Mrs. Arthur Abbey, for **Didgemere Delilah** and **Didgemere Deborah.**

Class 265.—*Milk Yield Class, Quantity, open to animals entered in Classes 255 to 259.*

2245 **I. (£5.)**—Mrs. Arthur Abbey, for **Didgemere Dream.** (See Class 258.)
2246 **II. (£3.)**—Mrs. Arthur Abbey, for **Didgemere Dusky.** (See Class 258.)
2244 **III. (£2.)**—Mrs. Arthur Abbey, for **Didgemere Delilah.** (See Class 264.)
2251 **IV. (£1.)**—Mrs. Morcom, for **Leazes Fortitude.** (See Class 259.)
2235 **V. (10s.)**—Mrs. John C. Straker, for **Leazes Fibarena.** (See Class 256.)
2226 **R. N.**—Mrs. John C. Straker, for **Leazes Hackee.**
H. C.—2248.

SHEEP.

Oxford Downs.

Class 266.—*Oxford Down Shearling Rams.*

2285 **I. (£10, & R.N. for Champion** [3]**), & 2284 II. (£5.)**—Hugh William Stilgoe, The Grounds, Adderbury, Banbury.
2283 **III. (£3),** & 2282 **R. N.**—Gilbert W. Overman, The Manor Farm, Weasenham, King's Lynn.
H. C.—2286. **C.**—2287.

Class 267.—*Oxford Down Ram Lambs.*

2292 **I. (£10.)**—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade.
2293 **II. (£5.)**—Evan Jeffries, Glebe Farm, Windrush, Burford, Oxon.
2288 **III. (£3),** & 2289 **R. N.**—Henry Akers & Co., Moat House, Black Bourton, Clanfield, Oxon.
H. C.—2290, 2291. **C.**—2294.

Class 268.—*Three Oxford Down Ram Lambs.*

2296 **I. (£10, Champion,**[3] **& Champion.**[4]**)**—Henry Akers & Co., Moat House, Black Bourton Clanfield, Oxon.
2299 **II. (£5.)**—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade.
2297 **III. (£3.)**—Major R. F. Fuller, Great Chalfield, Melksham, Wiltshire.
2300 **R. N.**—Evan Jeffries, Glebe Farm, Windrush, Burford, Oxon.
H. C.—2298. **C.**—2301.

Class 269.—*Oxford Down Shearling Ewes.*

2305 **I. (£10, R. N. for Champion,**[4] **& Champion** [5]**),** & 2306 **R. N.**—Hugh William Stilgoe, The Grounds, Adderbury, Banbury.
2304 **II. (£5.)**—Evan Jeffries, Glebe Farm, Windrush, Burford, Oxon.
2303 **III. (£3.)**—W. R. Gantlett & Son, Manor Farm, Fairford, Glos.

Class 270.—*Three Oxford Down Ewe Lambs.*

2310 **I. (£10, & R. N. for Champion.**[5]**)**—R. W. Hobbs & Sons, Ltd., Kelmscott, Lechlade.
2307 **II. (£5.)**—Henry Akers & Co., Moat House, Black Bourton, Clanfield, Oxon.
2311 **III. (£3.)**—Evan Jeffries, Glebe Farm, Windrush, Burford, Oxon.
2308 **R. N.**—Major R. F. Fuller, Great Chalfield, Melksham, Wiltshire.

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[1] The "Pomeroy" Challenge Cup, given through the British Goat Society, for the best Anglo-Nubian entered in the Anglo-Nubian section of the Society's Herd Book winning the highest number of points in the Milking Classes.

[2] The "Dewar" Cup, given through the British Goat Society, for the Exhibitor showing a Female Goat in milk, and a Goatling, under certain conditions.

[3] Silver Challenge Cup, value £25, given through the Oxford Down Sheep Breeders' Association, for the best Male exhibit in Classes 266 to 268.

[4] The "Heythrop" Silver Challenge Cup, value £75, given through the Oxford Down Sheep Breeders' Association, for the best exhibit in Classes 266 to 270.

[5] Silver Challenge Cup, value £25, given through the Oxford Down Sheep Breeders' Association, for the best Female exhibit in Classes 269 and 270.

Shropshires.

Class 271.—*Shropshire Two Shear Rams.*

2314 I. (£10, Champion,[1] & R. N. for Champion.[2])—CAPTAIN F. B. F. BIBBY, Hardwicke Grange, Shrewsbury.
2317 II. (£5.)—WILLIAM EVERALL, Shrawardine Castle, Shrewsbury.
2318 III. (£3.)—MRS. W. F. INGE, Thorpe, Tamworth, for **Thorpe Prince Charlie.**
2320 IV. (£2.)—J. G. PEEL, Peover Hall, Over Peover, Knutsford, for **Peover Monarch,** bred by T. A. Buttar, Corston, Coupar Angus.
2322 R. N.—THE EXORS. OF THE LATE JOSHUA HIRST WHEATLEY, Berkswell Hall, Coventry, for **Shrademont.**
H. C.—2321. C.—2315.

Class 272.—*Shropshire Shearling Rams.*

2334 I. (£10, & R. N. for Champion.[1])—EDWARD CRAIG TANNER, Eyton-on-Severn, Cross Houses, Salop.
2330 II. (£5.)—E. and F. NOCK, Harrington Hall, Shifnal, Salop.
2325 III. (£3.)—H. A. BROWN, Croft House, Grendon, Atherstone.
2331 IV. (£2.)—N. J. NUNNERLEY, Tern Hill House, Market Drayton, Salop.
2327 V. (£1.)—WILLIAM EVERALL, Shrawardine Castle, Shrewsbury.
2328 R. N.—MRS. W. F. INGE, Thorpe, Tamworth.
H. C.—2324, 2326. C.—2323.

Class 273.—*Three Shropshire Shearling Rams.*[3]

2344 I. (£10, & Champion.[2])—N. J. NUNNERLEY, Tern Hill House, Market Drayton, Salop.
2339 II. (£5.)—H. A. BROWN, Croft House, Grendon, Atherstone.
2345 III. (£3.)—EDWARD CRAIG TANNER, Eyton-on-Severn, Cross Houses, Salop.
2343 IV. (£2.)—E. and F. NOCK, Harrington Hall, Shifnal, Salop.
2337 R. N.—CAPTAIN F. B. F. BIBBY, Hardwicke Grange, Shrewsbury.
H. C.—2340, 2342.

Class 274.—*Three Shropshire Ram Lambs.*

2346 I. (£10.)—H. A. BROWN, Croft House, Grendon, Atherstone.
2350 II. (£5.)—N. J. NUNNERLEY, Tern Hill House, Market Drayton, Salop.
2349 III. (£3.)—E. and F. NOCK, Harrington Hall, Shifnal, Salop.
2347 R. N.—WILLIAM EVERALL, Shrawardine Castle, Shrewsbury.
H. C.—2352. C.—2351, 2353.

Class 275.—*Three Shropshire Shearling Ewes.*

2357 I. (£10), & 2358 III. (£3.)—MRS. W. F. INGE, Thorpe, Tamworth.
2355 II. (£5.)—H. A. BROWN, Croft House, Grendon, Atherstone.
2361 R. N.—THE EXORS. OF THE LATE JOSHUA HIRST WHEATLEY, Berkswell Hall, Coventry
H. C.—2354. C.—2359.

Class 276.—*Three Shropshire Ewe Lambs.*

2368 I. (£10.)—EDWARD CRAIG TANNER, Eyton-on-Severn, Cross Houses, Salop.
2362 II. (£5.)—H. A. BROWN, Croft House, Grendon, Atherstone.
2363 III. (£3.)—WILLIAM EVERALL, Shrawardine Castle, Shrewsbury.
2366 R. N.—N. J. NUNNERLEY, Tern Hill House, Market Drayton, Salop.
H. C.—2365, 2369. C.—2364, 2367.

Southdowns.

Class 277.—*Southdown Two Shear Rams.*

2370 I. (£10, & R. N. for Champion.[4])—SIR JEREMIAH COLMAN, BART., Gatton Park, Surrey.
2373 II. (£5.)—LADY LUDLOW, Luton Hoo, Luton, Beds.
2371 III. (£3), & 2372 R. N.—LADY FITZGERALD, Buckland, Faringdon, Berks.
H. C.—2374.

Class 278.—*Southdown Shearling Rams.*

2379 I. (£10, & Champion.[4])—LADY FITZGERALD, Buckland, Faringdon, Berks.
2380 II. (£5.)—LADY LUDLOW, Luton Hoo, Luton, Beds.
2382 III. (£3.)—R. METHERELL & SON, Thorney Manor, Emsworth, Sussex.
2378 IV. (£2.)—SIR JEREMIAH COLMAN, BART., Gatton Park, Surrey.
2384 R. N.—J. PIERPONT MORGAN, Wall Hall, Aldenham, Watford.
H. C.—2381. C.—2375, 2377.

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[1] Champion Silver Medal, given by the Shropshire Sheep Breeders' Association, for the best Ram in Classes 271 and 272.

[2] The "Eaton" Silver Challenge Cup, value Fifty Guineas, given through the Shropshire Sheep Breeders' Association, for the best exhibit of Shropshire Sheep in Classes 271 to 276.

[3] Prizes, except Fourth, given by the Shropshire Sheep Breeders' Association.

[4] Champion Gold Medal, value £10 10*s*., given by the Southdown Sheep Society, for the best Ram in Classes 277 and 278.

Class 279.—*Three Southdown Shearling Rams.*[1]

2388 I. (£10.)—Sir Jeremiah Colman, Bart., Gatton Park, Surrey.
2390 II. (£5.)—Lady Ludlow, Luton Hoo, Luton, Beds.
2386 III. (£3.)—His Majesty the King, Sandringham.
2391 R. N.—R. Metherell & Son, Thorney Manor, Emsworth, Sussex.
H. C.—2389. C.—2387.

Class 280.—*Three Southdown Ram Lambs.*

2395 I. (£10.)—The Earl of Derby, K.G., Hatchfield Farm, Newmarket.
2394 II. (£5.)—Sir Jeremiah Colman, Bart., Gatton Park, Surrey.
2399 III. (£3.)—J. Pierpont Morgan, Wall Hall, Aldenham, Watford.
2396 R. N.—Lady Fitzgerald, Buckland, Faringdon, Berks.
H. C.—2392. C.—2398.

Class 281.—*Three Southdown Shearling Ewes.*

2404 I. (£10, & Champion.[2])—J. Pierpont Morgan, Wall Hall, Aldenham, Watford.
2403 II. (£5, & R. N. for Champion.[2])—Lady Ludlow, Luton Hoo, Luton, Beds.
2402 III. (£3.)—Sir Jeremiah Colman, Bart., Gatton Park, Surrey.
2400 R. N.—His Majesty the King, Sandringham.
H. C.—2401.

Class 282.—*Three Southdown Ewe Lambs.*

2410 I. (£10.)—Lady Ludlow, Luton Hoo, Luton, Beds.
2408 II. (£5.)—The Earl of Derby, K.G., Hatchfield Farm, Newmarket.
2412 III. (£3.)—J. Pierpont Morgan, Wall Hall, Aldenham, Watford.
2407 R. N.—Sir Jeremiah Colman, Bart., Gatton Park, Surrey.
H. C.—2405. C.—2406, 2409, 2411.

Hampshire Downs.

Class 283.—*Hampshire Down Shearling Rams.*

2416 I. (£10, & Champion.[3])—James Goldsmith, Blendworth, Horndean, Cosham, Hants.
2418 II. (£5.)—Major and Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.
2420 III. (£3.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
2414 IV. (£2.)—H. W. Bishop and J. W. Measures, Pendley Stock Farms, Tring.
H. C.—2422. C.—2413, 2417.

Class 284.—*Hampshire Down Ram Lambs.*

2426 I. (£10.)—James Goldsmith, Blendworth, Horndean, Cosham, Hants.
2432 II. (£5.)—V. T. Thompson, Norton Manor, Sutton Scotney, Hants.
2428 III. (£3.)—Major and Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.
2429 IV. (£2.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
2433 R. N.—Colonel C. W. Sofer Whitburn, Amport, Andover.
H. C.—2425, 2431. C.—2424, 2427, 2430.

Class 285.—*Three Hampshire Down Ram Lambs.*

2437 I. (£10, & R. N. for Champion.[3])—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
2439 II. (£5.)—Colonel C. W. Sofer Whitburn, Amport, Andover.
2436 III. (£3.)—Major and Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.
2435 R. N.—James Goldsmith, Blendworth, Horndean, Cosham, Hants.
H. C.—2438. C.—2434.

Class 286.—*Three Hampshire Down Shearling Ewes.*

2440 I. (£10), & 2441 II. (£5.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
2442 III. (£3.)—Colonel C. W. Sofer Whitburn, Amport, Andover.

Class 287.—*Three Hampshire Down Ewe Lambs.*

2446 I. (£10.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
2443 II. (£5.)—H. W. Bishop and J. W. Measures, Pendley Stock Farms, Tring.
2447 III. (£3.)—V. T. Thompson, Norton Manor, Sutton Scotney, Hants.
2445 R. N.—Major and Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.

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[1] Prizes given by the Southdown Sheep Society.

[2] Champion Silver Medal, given by the Southdown Sheep Society, for the best Pen of Ewes or Ewe Lambs in Classes 281 and 282.

[3] Champion Prize of £10, given by the Hampshire Down Sheep Breeders' Association, for the best exhibit in Classes 283 to 287.

Suffolks.

Class 288.—*Suffolk Two Shear Rams.*

2449 I. (£10.)—R. L. Barclay, Higham, Bury St. Edmunds, for Babraham Higham Deans I 17522, bred by C. R. W. Adeane, C.B., Babraham, Cambridge.
2450 II. (£5.)—S. R. Sherwood, Playford, Ipswich.

Class 289.—*Suffolk Shearling Rams.*

2457 I. (£10.)—S. R. Sherwood, Playford, Ipswich.
2453 II. (£5.)—T. W. Goodchild, The Change, Great Yeldham, Essex, for Carlton Improver 18308, bred by the Exors. of the late Sir Ernest Cassel, Carlton Grange, Newmarket.
2452 III. (£3.)—Lieut.-Colonel C. Brook, Kinmount, Annan, for Kinmount Energy.
2451 R. N.—R. L. Barclay, C.B.E., Higham, Bury St. Edmunds.
H. C.—2458. C.—2456.

Class 290.—*Suffolk Ram Lambs.*

2469 I. (£10, & R. N. for Champion.[1])—W. F. Paul, Kirton Lodge, Kirton, Ipswich.
2465 II. (£5.)—G. A. Goodchild, Gt. Yeldham Hall, Gt. Yeldham, Essex.
2462 III. (£3), & 2461 V. (£1.)—Sir Ernest Cassel's Exors., Carlton Grange, Brinkley, Newmarket.
2470 IV. (£2.)—S. R. Sherwood, Playford, Ipswich.
2464 R. N.—G. R. C. Foster, Anstey Hall, Trumpington, Cambridge.
H. C.—2460.

Class 291.—*Three Suffolk Ram Lambs.*[2]

2480 I. (£10.)—W. F. Paul, Kirton Lodge, Kirton, Ipswich.
2477 II. (£5.)—G. A. Goodchild, Gt. Yeldham Hall, Gt. Yeldham, Essex.
2474 III. (£3.)—Sir Ernest Cassel's Exors., Carlton Grange, Brinkley, Newmarket.
2476 IV. (£2.)—G. R. C. Foster, Anstey Hall, Trumpington, Cambridge.
2481 R. N.—S. R. Sherwood, Playford, Ipswich.

Class 292.—*Three Suffolk Shearling Ewes.*

2483 I. (£10.)—R. L. Barclay, C.B.E., Higham, Bury St. Edmunds.
2488 II. (£5.)—W. F. Paul, Kirton Lodge, Kirton, Ipswich.
2484 III. (£3.)—Lieut.-Colonel C. Brook, Kinmount, Annan.
2485 R. N.—T. W. Goodchild, The Change, Great Yeldham, Essex.

Class 293.—*Three Suffolk Ewe Lambs.*

2497 I. (£10, & Champion.[1])—W. F. Paul, Kirton Lodge, Kirton, Ipswich.
2491 II. (£5.)—Sir Ernest Cassel's Exors., Carlton Grange, Brinkley, Newmarket.
2493 III. (£3.)—G. R. C. Foster, Anstey Hall, Trumpington, Cambridge.
2494 IV. (£2.)—G. A. Goodchild, Gt. Yeldham Hall, Gt. Yeldham, Essex.
2498 R. N.—S. R. Sherwood, Playford, Ipswich.

Dorset Downs.

Class 294.—*Dorset Down Rams, Shearling and upwards.*

2500 I. (£10, & R. N. for Champion.[3])—Hooper Bros., Newburgh Farm, Winfrith, Dorset for ram born in 1924.
2503 II. (£5.)—Randolph Tory, Charlsworth, Blandford, for ram born in 1924.
2502 III. (£3.)—P. and C. Seward, Weston, Petersfield, for ram born in 1924, bred by Mrs. L. de Rothschild, Exbury, Southampton.

Class 295.—*Dorset Down Ram Lambs.*[4]

2506 I. (£10.)—Hooper Bros., Newburgh Farm, Winfrith, Dorset.
2504 II. (£5), & 2505 R. N.—Mrs. Lionel de Rothschild, Exbury, Southampton.
2507 III. (£3.)—P. and C. Seward, Weston, Petersfield.

Class 296.—*Dorset Down Shearling Ewes.*

2514 I. (£10, & Champion.[3])—Hooper Bros., Newburgh Farm, Winfrith, Dorset.
2513 II. (£5), & 2512 III. (£3.)—Mrs. Lionel de Rothschild, Exbury, Southampton.

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[1] Perpetual Challenge Plate and £5 in cash, given by the Suffolk Sheep Society, for the best exhibit in Classes 288 to 293.

[2] Prizes, except Fourth, given by the Suffolk Sheep Society.

[3] Champion Prize of £5, given by the Dorset Down Sheep Breeders' Association, for the best exhibit in Classes 294 to 296.

[4] Prizes given by the Dorset Down Sheep Breeders' Association.

Dorset Horns.

Class 297.—*Dorset Horn Shearling Rams, born on or after November* 1, 1923.

2517 **I. (£10.)**—Frank J. Merson & Son, Farringdon, North Petherton, Bridgwater.

Class 298.—*Dorset Horn Ram Lambs, born on or after November* 1, 1924.[1]

2520 **I. (£10.)**—Frank J. Merson & Son, Farringdon, North Petherton, Bridgwater, for **Merson's Chester Laddie.**
2519 **II. (£5.)**—Frank J. Merson & Son, for **Merson's Chester Boy.**
2518 **III. (£3.)**—Frank J. Merson & Son.

Class 299.—*Three Dorset Horn Shearling Ewes, born on or after November* 1, 1923.

2522 **I. (£10.)**—Sir Charles Seely, Bart., Gatcombe House, Isle of Wight.
2521 **II. (£5.)**—Frank J. Merson & Son, Farringdon, North Petherton, Bridgwater.

Wiltshire or Western Horns.

Class 300.—*Wiltshire or Western Horn Rams, Two Shear and upwards.*[2]

2525 **I. (£10, & R. N. for Champion.[3])**—Lewis Lewis, Manor Farm, Crick, Rugby, for **Simpson Victory 161**, born in 1923, bred by C. J. Janes, The Mount, Simpson, Bletchley.
2528 **II. (£5.)**—William B. Southernwood, Gubblecore, Tring, for **Hulcore Surprise**, born in 1923, bred by G. Verey, Hulcore, Towcester.
2524 **III. (£3.)**—W. R. Jerman, Penyorsedd Cemlyn, Cemaes Bay, Anglesey, for **Wigan Champion 245**, born in 1922, bred by W. J. Roberts, Frogwy Fawr, Anglesey.

Class 301.—*Wiltshire or Western Horn Shearling Rams.*

2529 **I. (£10.)**—Joseph Brodie, Brockhall, Weedon, for **Brockhall Sergeant.**
2531 **II. (£5.)**—J. S. Roads, Norduck House, Aston Abbotts, Aylesbury, for **Norduck Ranger**, bred by W. J. Coates, The Lodge, Newport Pagnell.
2530 **III. (£3.)**—Randall Bros., Moulsoe Buildings Farm, Newport Pagnell, for **Moulsoe Invincible.**

Class 302.—*Three Wiltshire or Western Horn Shearling Ewes.*

2534 **I. (£10, & Champion.[3])**—J. S. Roads, Norduck House, Aston Abbotts, Aylesbury.
2532 **II. (£5.)**—Joseph Brodie, Brockhall, Weedon.
2533 **III. (£3.)**—Lewis Lewis, Manor Farm, Crick, Rugby.

Ryelands.

Class 303.—*Ryeland Rams, Two Shear and upwards.*

2542 **I. (£10.)**—Thomas L. Martin, Ashe Warren House, Overton, Hants, for **Herald of Ashe**, born in 1922, bred by F. T. Gough, Lugwardine, Hereford.
2544 **II. (£5.)**—David J. Thomas, Talachddu, Brecon, for **Talachddu Glory**, born in 1923.
2543 **III. (£3.)**—F. W. Morris, Brynderwen Farm, Llangasty, Talyllyn, Brecon, for **Brynderwen Foreman 1332**, born in 1923.
2541 **IV. (£2.)**—Thomas L. Martin, for **Ashe Radius**, born in 1923.
2536 **R. N.**—Edward Davies, Oaklands, Brecon, for **Talachddu Guard.**
H. C.—2537, 2538, 2539.

Class 304.—*Ryeland Shearling Rams.*

2551 **I. (£10, & Champion.[4])**—Thomas L. Martin, Ashe Warren House, Overton, Hants, for **Ashe Dandy.**
2555 **II. (£5, & R. N. for Champion.[4])**—David J. Thomas, Talachddu, Brecon, for **Talachddu Hallmark.**
2549 **III. (£3.)**—E. W. Langford, Ltd., Wye Bridge, Hereford, for **Pomona Donoghue.**
2548 **IV. (£2.)**—Mrs. Herbert-Huddleston, Clytha Park, Abergavenny, for **Clytha Paragon.**
2552 **R. N.**—Thomas L. Martin, for **Ashe Star.**
H. C.—2550, 2554. **C.**—2545, 2546, 2547.

Class 305.—*Three Ryeland Ram Lambs.*

2561 **I. (£10.)**—Thomas L. Martin, Ashe Warren House, Overton, Hants.
2557 **II. (£5.)**—Hubert Groom, Warham, Wells, Norfolk.
2560 **III. (£3.)**—E. W. Langford, Ltd., Wye Bridge, Hereford.
2556 **R. N.**—Mark Fenwick, Abbotswood, Stow-on-the-Wold.

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[1] Prizes given by the Dorset Horn Sheep Breeders' Association.

[2] Prizes given by the Wiltshire or Western Horn Sheep Society.

[3] The "Brampton Ash" Silver Challenge Cup, value Ten Guineas, given through the Wiltshire or Western Horn Sheep Society, for the best exhibit in Classes 300 to 302.

[4] Silver Challenge Cup, given through the Ryeland Flock Book Society, for the best exhibit in Classes 303 to 307.

Class 306.—*Three Ryeland Shearling Ewes.*

2569 **I. (£10.)**—E. W. Langford, Ltd., Wye Bridge, Hereford.
2566 **II. (£5.)**—Hubert Groom, Warham, Wells, Norfolk.
2570 **III. (£3.)**—Thomas L. Martin, Ashe Warren House, Overton, Hants.
2565 **R. N.**—Mark Fenwick, Abbotswood, Stow-on-the-Wold.
H. C.—2564, 2568.

Class 307.—*Three Ryeland Ewe Lambs.*

2571 **I. (£10.)**—Hubert Groom, Warham, Wells, Norfolk.
2574 **II. (£5.)**—Thomas L. Martin, Ashe Warren House, Overton, Hants.
2573 **III. (£3.)**—E. W. Langford, Ltd., Wye Bridge, Hereford.
2572 **R. N.**—F. H. Healing, Chapel Farm, Walton Cardiff, Tewkesbury.

Kerry Hill (Wales).

Class 308.—*Kerry Hill (Wales) Rams, Two Shear and upwards.*

2580 **I. (£10.)**—J. C. Jones, Graig, Llanfair, Welshpool, for **Goitre Lieutenant** 8331, born in 1922, bred by W. R. Carfield, Goitre, Kerry, Mont.
2585 **II. (£5.)**—The Duke of Westminster, G.C.V.O., D.S.O., Eaton Hall, Chester, for **Eaton Oberon** 9056, born in 1923.
2583 **III. (£3.)**—The Earl of Powis, Powis Castle, Welshpool, for **Farlands Tantalus** 9110, born in 1923, bred by J. Hamar, The Farlands, Brampton Brian.
2582 **IV. (£2.)**—E. D. Moore, Brampton Brian, Herefordshire, for **Maesmawr Recorder** 8559, born in 1922, bred by T. Kinsey, Maesmawr, Coerswrs.
2584 **V. (£1.)**—Mrs. E. Tate, Swinford Lodge, Rugby, for **Swinford Hotspur** 9695, born in 1923.
2576 **R. N.**—W. V. Davies, Pentrenant, Church Stoke, for **Ragdon Orator.**
H. C.—2575.

Class 309.—*Kerry Hill (Wales) Shearling Rams.*

2594 **I. (£10.)**—The Marquess of Londonderry, K.G., P.C., Plas Machynlleth, Machynlleth, Mont., for **Great Weston Yeoman,** bred by T. Jones & Sons, Great Weston, Montgomery.
2588 **II. (£5.)**—Ben Alderson, Glanmiheli, Kerry, Mont., for **Kerry Uxter,** bred by Mrs. Pugh, Jamesford, Montgomery.
2601 **III. (£3.)**—The Duke of Westminster, G.C.V.O., D.S.O., Eaton Hall, Chester, for **Eaton Prototype.**
2592 **IV. (£2.)**—Thomas Jones, Great Weston Farm, Montgomery, for **Great Weston Youngster.**
2589 **V. (£1.)**—Dinam Estates Company, Llandinam Hall Farm, Llandinam, Mont., for **Gwernygoe Edgar.**
2598 **R. N.**—The Earl of Powis, Powis Castle, Welshpool, for **Powysland Jester.**
H. C.—2599.

Class 310.—*Kerry Hill (Wales) Ram Lambs.*

2603 **I. (£10.)**—David Percival Barnett, Walterston, Llancarfan, Cowbridge.
2616 **II. (£5.)**—Captain J. M. Naylor, Leighton Hall, Welshpool, for **Leighton Imp.**
2615 **III. (£3.)**—E. D. Moore, Brampton Brian, for **Brampton Envoy.**
2608 **IV. (£2.)**—Thomas Jones, Great Weston Farm, Montgomery, for **Great Weston Zeal.**
2617 **V. (£1.)**—The Earl of Powis, Powis Castle, Welshpool, for **Powysland King.**
2609 **R. N.**—W. H. Leslie, Bryntanat, Llansantffraid, Mont.

Class 311.—*Three Kerry Hill (Wales) Shearling Ewes.*

2628 **I. (£10.)**—Captain J. M. Naylor, Leighton Hall, Welshpool.
2631 **II. (£5.)**—Mrs. E. Tate, Swinford Lodge, Rugby.
2629 **III. (£3.)**—The Earl of Powis, Powis Castle, Welshpool.
2633 **IV. (£2.)**—The Duke of Westminster, G.C.V.O., D.S.O., Eaton Hall, Chester.
2625 **V. (£1.)**—W. H. Leslie, Bryntanat, Llansantffraid, Mont.
2630 **R. N.**—Stewart Robinson, The Ovals, Kington, Herefordshire.

Class 312.—*Three Kerry Hill (Wales) Ewe Lambs.*[1]

2639 **I. (£10.)**—E. D. Moore, Brampton Brian, Herefordshire.
2640 **II. (£5.)**—Captain J. M. Naylor, Leighton Hall, Welshpool.
2641 **III. (£3.)**—Stewart Robinson, The Ovals, Kington, Herefordshire.
2636 **R. N.**—Lord Harlech, Brogyntyn, Oswestry.
H. C.—2637, 2638.

Lincolns.

Class 313.—*Lincoln Two Shear Rams.*

2645 **I. (£10.)**—Clifford Nicholson, Horkstow Manor, Barton-on-Humber, for **Horkstow Manor Golliwog.**
2646 **II. (£5),** & 2647 **III. (£3.)**—Rawnsley & Tindall, Park House, Louth, and Well Vale, Alford, Lincs.
2643 **R. N.**—J. H. Dean & Sons, Heath House, Nocton, Lincoln.

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[1] Prizes given by the Kerry Hill (Wales) Flock Book Society.

Class 314.—*Lincoln Shearling Rams.*

2658 I. (£10, & Champion.[1])—CLIFFORD NICHOLSON, Horkstow Manor, Barton-on-Humber.
2656 II. (£5, & R. N. for Champion.[1]), & 2655 R. N.—CHARLES E. HOWARD, Nocton Rise, Lincoln.
2653 III. (£3), & 2652 IV. (£2.)—J. H. DEAN & SONS, Heath House, Nocton, Lincoln.
2661 V. (£1.)—RAWNSLEY & TINDALL, Park House, Louth, and Well Vale, Alford, Lincs.

Class 315.—*Three Lincoln Shearling Rams.*[2]

2673 I. (£15.)—RAWNSLEY & TINDALL, Park House, Louth, and Well Vale, Alford, Lincs.
2669 II. (£10.)—CHARLES E. HOWARD, Nocton Rise, Lincoln.
2666 III. (£5.)—J. H. DEAN & SONS, Heath House, Nocton, Lincoln.
2671 IV. (£3.)—CLIFFORD NICHOLSON, Horkstow Manor, Barton-on-Humber.
2665 R. N.—THOMAS CAMPION, East Heslerton, York.

Class 316.—*Three Lincoln Ram Lambs.*

2674 I. (£10.)—ERNEST ADDISON, Riby Grange, Stallingboro', Lincs.
2676 II. (£5), & 2677 R. N.—J. H. DEAN & SONS, Heath House, Nocton, Lincs.
2681 III. (£3.)—RAWNSLEY & TINDALL, Park House, Louth, and Well Vale, Alford, Lincs.
H. C.—2679.

Class 317.—*Three Lincoln Shearling Ewes.*

2684 I. (£10), & 2685 R. N.—CHARLES E. HOWARD, Nocton Rise, Lincoln.
2682 II. (£5.)—ERNEST ADDISON, Riby Grange, Stallingboro', Lincs.
2688 III. (£3.)—RAWNSLEY & TINDALL, Park House, Louth, and Well Vale, Alford, Lincs.

Class 318.—*Three Lincoln Ewe Lambs.*

2691 I. (£10), & 2692 R. N.—J. H. DEAN & SONS, Heath House, Nocton, Lincoln.
2689 II. (£5.)—ERNEST ADDISON, Riby Grange, Stallingboro', Lincs.
2694 III. (£3.)—RAWNSLEY & TINDALL, Park House, Louth, and Well Vale, Alford, Lincs.

Leicesters.

Class 319.—*Leicester Shearling Rams.*

2698 I. (£10, & Champion[3]), & 2697 II. (£5.)—W. JORDAN, Eastburn, Driffield.
2701 III. (£3.)—R. MEGGINSON, Garton Field, Driffield
2702 IV. (£2.)—C. H. SIMPSON & SONS, Castle House, Hunmanby.
H. C.—2699. C.—2695, 2696.

Class 320.—*Leicester Ram Lambs.*

2704 I. (£10), & 2705 III. (£3.)—W. JORDAN, Eastburn, Driffield.
2706 II. (£5.)—R. MEGGINSON, Garton Field, Driffield.
2708 R. N.—C. H. SIMPSON & SONS, Castle House, Hunmanby.
C.—2707, 2709.

Class 321.—*Leicester Shearling Ewes.*

2718 I. (£10, & R. N. for Champion.[3])—C. H. SIMPSON & SONS, Castle House, Hunmanby.
2714 II. (£5), & 2713 III. (£3.)—W. JORDAN, Eastburn, Driffield.
2716 IV. (£2.)—R. MEGGINSON, Garton Field, Driffield.
2712 R. N.—HOLTBY & STOCKS, Haywold, North Dalton, Driffield.
H. C.—2717. C.—2719.

Class 322.—*Leicester Ewe Lambs.*

2720 I. (£10.)—W. JORDAN, Eastburn, Driffield.
2724 II. (£5), & 2725 R. N.—C. H. SIMPSON & SONS, Castle House, Hunmanby.
2722 III. (£3.)—R. MEGGINSON, Garton Field, Driffield.
H. C.—2721.

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[1] Champion Prize of £5, given by the Lincoln Longwool Sheep Breeders' Association, for the best Ram in Classes 313 and 314.

[2] Prizes given by the Lincoln Longwool Sheep Breeders' Association.

[3] Champion Silver Medal, given by the Leicester Sheep Breeders' Association, for the best exhibit in Classes 319 to 322.

Border Leicesters.

Class 323.—*Border Leicester Rams, Two Shear and upwards.*

2727 I. (£10, & Champion.[1])—John Young, Skerrington Mains, Hurtford, N.B., for **Sandyknowe Astrologer**, born in 1922, bred by T. and M. Templeton, Sandyknowe, Kelso.
2726 II. (£5.)—William Davidson, East Learmouth, Cornhill-on-Tweed, for **High Force**, born in 1921, bred by R. and W. B. Dickinson, Longcroft, Berwick.

Class 324.—*Border Leicester Shearling Rams.*

2728 I. (£10.)—William Davidson, East Learmouth, Cornhill-on-Tweed.

Class 325.—*Border Leicester Ewes, Two Shear and upwards, with lambs at foot.*

2729 I. (£10.)—William Davidson, East Learmouth, Cornhill-on-Tweed, for ewe, born in 1924.

Class 326.—*Border Leicester Shearling Ewes.*

2732 I. (£10, & R. N. for Champion.[1])—John Young, Skerrington Mains, Hurlford, for ewe, bred by T. and M. Templeton, Sandyknowe, Kelso.
2730 II. (£5.)—William Davidson, East Learmouth, Cornhill-on-Tweed.
2731 III. (£3.)—John Moore, St. Demiol's Ash, Hawarden, Chester.

Wensleydales.

Class 327.—*Wensleydale Rams, Two Shear and upwards.*

2736 I. (£10.)—John Dargue, Burneside Hall, Kendal, for **Carper by Blue Prince 3088**, born in 1922, bred by J. Hargrave, Wath, Ripon.
2737 II. (£5.)—John Percival, Easthouse, Carperby, Yorks, for **Royal Leicester**, born in 1923, bred by F. Foster, Gallow Hill, Ripon.
2734 III. (£3.)—The Marquis of Bute, K.T., Dumfries House, Old Cumnock, for **Roseburn Holme**, born in 1923, bred by J. W. Greensit, Holme-on-Swale, Thirsk.
2738 R. N.—J. B. Smalley, Birkby Hall, Cark-in-Cartmel, for **Borwick Dreadnought**.
H. C.—2733, 2735.

Class 328.—*Wensleydale Shearling Rams.*

2745 I. (£10.)—John A. Willis, Manor House, Carperby, Yorks.
2743 II. (£5.)—John William Greensit, Holme-on-Swale, Thirsk, for ram, bred by Edward Alfred Greensit, Holme Lodge, Thirsk.
2739 III. (£3.)—John Allison, Howgrave Hall, Kirklington, Bedale.
2744 R. N.—John Percival, Easthouse, Carperby, Yorks.
H. C.—2746. C.—2740, 2741.

Class 329.—*Three Wensleydale Shearling Rams.*

2750 I. (£10.)—John A. Willis, Manor House, Carperby, Yorks.
2748 II. (£5.)—John Percival, Easthouse, Carperby, Yorks, for rams, bred by J. O. Brocklebank, Grange-over-Sands.
2747 III. (£3.)—John William Greensit, Holme-on-Swale, Thirsk.
2749 R. N.—J. B. Smalley, Birkby Hall, Cark-in-Cartmel, for **Birkby Monarch, Birkby Victor, and Birkby Challenger.**

Class 330.—*Wensleydale Shearling Ewes.*

2751 I. (£10.)—John Allison, Howgrave Hall, Kirklington, Bedale.
2752 II. (£5.)—John William Greensit, Holme-on-Swale, Thirsk.
2753 III. (£3.)—John Percival, Easthouse, Carperby, Yorks, for ewe, bred by J. O. Brocklebank, Grange-over-Sands.
2755 R. N.—John A. Willis, Manor House, Carperby, Yorks.
H. C.—2754, 2756.

Class 331.—*Wensleydale Yearling Ewes, shown in Wool.*[2]

2758 I. (£10.)—John William Greensit, Holme-on-Swale, Thirsk.
2760 II. (£5.)—John Percival, Easthouse, Carperby, Yorks, for ewe, bred by J. Allison, Howgrave Hall, Bedale.
2761 III. (£3.)—J. B. Smalley, Birkby Hall, Cark-in-Cartmel, Lancs, for ewe, bred by G. Dickinson, The Mount, Cark-in-Cartmel.
2757 R. N.—John Allison, Howgrave Hall, Kirklington, Bedale.
H. C.—2759.

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[1] Perpetual Silver Challenge Cup, value Sixty Guineas, given by the Society of Border Leicester Sheep Breeders, for the best Ram or Ewe in Classes 323 to 326.

[2] Prizes given by the Wensleydale Longwool Sheep Breeders' Association.

Kent or Romney Marsh.

Class 332.—*Kent or Romney Marsh Two-Shear Rams.*

2765 **I. (£10, & Champion [1]),** & 2764 **III. (£3.)**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2762 **II. (£5, & R. N. for Champion.[1])**—J. RAYNER BETTS, Greenhill, Otham, Maidstone.
2763 **R. N.**—THE EARL OF GUILFORD, Waldershare Park, Dover.

Class 333.—*Kent or Romney Marsh Shearling Rams.*

2774 **I. (£10),** 2773 **II. (£5),** & 2772 **IV. (£2.)**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2775 **III. (£3.)**—ASHLEY STEVENS, Davington Hall, Faversham.
2770 **V. (£1.)**—THE EARL OF GUILFORD, Waldershare Park, Dover.
2779 **R. N.**—WALTER F. WOOD, Chekes Court, Sittingbourne.
C.—2768, 2776.

Class 334.—*Three Kent or Romney Marsh Shearling Rams.*[2]

2787 **I. (£20),** & 2786 **II. (£15.)**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2788 **III. (£10.)**—ASHLEY STEVENS, Davington Hall, Faversham.
2782 **IV. (£5),** & 2783 **R. N.**—THE EARL OF GUILFORD, Waldershare Park, Dover.
H. C.—2785. **C.**—2780, 2789.

Class 335.—*Three Kent or Romney Marsh Ram Lambs.*

2793 **I. (£10),** & 2795 **II. (£5.)**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2791 **III. (£3),** & 2792 **R. N.**—THE EARL OF GUILFORD, Waldershare Park, Dover.
H. C.—2790. **C.**—2794.

Class 336.—*Three Kent or Romney Marsh Shearling Ewes.*

2801 **I. (£10, & Champion [3]),** 2799 **III. (£3),** & 2800 **R. N.**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2798 **II. (£5.)**—THE EARL OF GUILFORD, Waldershare Park, Dover.
H. C.—2797. **C.**—2796.

Class 337.—*Three Kent or Romney Marsh Ewe Lambs.*

2806 **I. (£10, & R. N. for Champion [3]),** 2805 **II. (£5),** & 2807 **III. (£3.)**—JOHN EGERTON QUESTED, The Firs, Cheriton, Kent.
2803 **R. N.**—THE EARL OF GUILFORD, Waldershare Park, Dover.
H. C.—2802, 2804.

Cotswolds.

Class 338.—*Cotswold Shearling Rams.*[4]

2810 **I. (£10),** 2808 **II. (£5),** & 2809 **III. (£3.)**—WILLIAM GARNE, Ablington, Fairford, Glos.

Class 339.—*Cotswold Ram Lambs.*

2811 **I. (£10),** 2813 **II. (£5),** & 2812 **III. (£3.)**—WILLIAM GARNE, Ablington, Fairford.

Class 340.—*Cotswold Ewe Lambs.*

2815 **I. (£10),** 2814 **II. (£5),** & 2816 **III. (£3.)**—WILLIAM GARNE, Ablington, Fairford

Devon Long-Wools.

Class 341.—*Devon Long-Wool Shearling Rams.*

2817 **I. (£10),** & 2818 **II. (£5.)**—THOMAS JOHN PEARCEY, Peadhill, Tiverton.
2820 **III. (£3),** & 2819 **R. N.**—FREDERICK WHITE, Torweston, Williton, Somerset.

Class 342.—*Devon Long-Wool Shearling Ewes.*

2823 **I. (£10),** & 2822 **III. (£3.)**—FREDERICK WHITE, Torweston, Williton, Somerset.
2821 **II. (£5.)**—THOMAS JOHN PEARCEY, Peadhill, Tiverton.

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[1] Champion Prize of £10 10*s*., given by the Kent or Romney Marsh Sheep Breeders' Association, for the best Ram in Classes 332 and 333.

[2] Prizes given by the Kent or Romney Marsh Sheep Breeders' Association.

[3] Champion Prize of £10 10*s*., given by the Kent or Romney Marsh Sheep Breeders' Association, for the best Pen of Ewes or Ewe Lambs in Classes 336 and 337.

[4] Prizes given by the Cotswold Sheep Society.

South Devons.

Class 343.—*South Devon Rams, Two Shear and upwards.*[1]

2825 **I. (£10.)**—J. R. Hallett, Sherford, Brixton, Plymouth, for **Croft No. 5 of 1923** 18741, born in 1923, bred by T. Maye, Croft, Kingsbridge, Devon.

2828 **II. (£5.)**—Herbert Whitley, Primley, Paignton, for **Twelvewoods No. 8 of 1922** 17839, born in 1922, bred by H. Body, Twelvewoods, Liskeard, Cornwall.

2826 **III. (£3.)**—J. R. Hallett, for **Halletts No. 10 of 1923** 18829, born in 1923.

Class 344.—*South Devon Shearling Rams.*

2834 **I. (£10.)**—Herbert Whitley, Primley, Paignton.

2830 **II. (£5.)**—J. R. Hallett, Sherford, Brixton, Plymouth, for **Halletts No. 3** 19719.

2829 **III. (£3.)**—J. R. Hallett, for **Halletts No. 2** 19718.

2832 **R. N.**—J. W. Symons, East Sherford, Brixton, Plymouth

H. C.—2833.

Class 345.—*South Devon Ram Lambs.*[1]

2839 **I. (£10.)**—Herbert Whitley, Primley, Paignton.

2838 **II. (£5.)**—J. W. Symons, East Sherford, Brixton, Plymouth.

2836 **III. (£3.)**—J. R. Hallett, Sherford, Brixton, Plymouth.

2835 **R. N.**—William Charles Bice, Nanswhyden, St Columb, Cornwall.

Class 346.—*South Devon Shearling Ewes.*

2843 **I. (£10)**, & 2844 **II. (£5.)**—Herbert Whitley, Primley, Paignton.

2840 **III. (£3.)**—William Charles Bice, Nanswhyden, St. Columb, Cornwall.

Lonks.

Class 347.—*Lonk Rams, Shearling and upwards.*

2845 **I. (£10.)**—Thomas Brayshaw, Dean Farm, Portsmouth, Todmorden, for **Hill Top Swell,** R. 11, born in 1921, bred by Miss A. Redman, Hill Top Farm, Pecket Well, Hebden Bridge.

2848 **II. (£5.)**—Alfred Taylor, Prince Bank Farm, Lumb-in-Rossendale, for **Prince Bank Billie,** born in 1923, bred by Thomas Brayshaw, Dean Farm, Portsmouth, Todmorden.

2846 **III. (£3.)**—Harry O. Mitchell, Blackmoor Farm, Oxenhope, Keighley, for **Blackmoor Jim** R. 12, born in 1922, bred by G. H. Hall, Mount Pleasant, Oxenhope, Keighley.

Class 348.—*Lonk Shearling Ewes.*

2849 **I. (£10.)**—Thomas Brayshaw, Dean Farm, Portsmouth, Todmorden.

2851 **II. (£5)**, & 2850 **R. N.**—Harry O. Mitchell, Blackmoor Farm, Oxenhope, Keighley.

2856 **III. (£3.)**—Alfred Taylor, Prince Bank Farm, Lumb-in-Rossendale, for **Prince Bank Peggy.**

H. C.—2852.

Swaledales.

Class 349.—*Swaledale Rams, born in or before* 1923.

2857 **I. (£10.)**—Joseph William Dent, Fair View, Middleton-in-Teesdale, Darlington, for **Loop Forward** A 417, born in 1923, bred by A. A. Dent, Pasture End, Bowes.

2858 **II. (£5.)**—John Lawrence Peacock, Punchard House, Arkengarthdale, Richmond, Yorks, for ram, born in 1923, bred by J. Cleasby, Heggerscale, Kaber, Westmorland.

2859 **III. (£3.)**—John Lawrence Peacock, for **Billy B** 286, born in 1922, bred by William Alderson, Thringill, Kirkby Stephen.

Class 350.—*Swaledale Rams, born in* 1924.[2]

2860 **I. (£10.)**—Joseph William Dent, Fair View, Middleton-in-Teesdale, Darlington.

2862 **II. (£5.)**—John Lawrence Peacock, Punchard House, Arkengarthdale, Richmond, Yorks.

2861 **III. (£3.)**—Joseph William Dent, for ram, bred by C. Hutchinson, Sleightholm, Bowes.

Class 351.—*Two Swaledale Ewes, born in or before* 1923.

2866 **I. (£10.)**—John Wearmouth, Nettle Pot, Lunedale, Middleton-in-Teesdale, Darlington, for ewes, born in 1922.

2864 **II. (£5)**, & 2865 **III. (£3.)**—John Lawrence Peacock, Punchard House, Arkengarthdale, Richmond, Yorks, for ewes, born in 1922–23.

Class 352.—*Two Swaledale Ewes, born in* 1924.[2]

2869 **I. (£10)**, 2867 **II. (£5)**, & 2868 **III. (£3.)**—John Lawrence Peacock, Punchard House, Arkengarthdale, Richmond, Yorks.

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[1] Prizes given by the South Devon Flock Book Association.

[2] Prizes given by the Swaledale Sheep Breeders' Association.

Herdwicks.

Class 353.—*Herdwick Rams, Two Shear and upwards.*[1]

2874 **I. (£10.)**—Richard N. Wilson, Middle Row, Wasdale Head, Gosforth, Cumberland, for **Wasdale Conqueror**, born in 1920.

2872 **II. (£5.)**—S. D. Stanley-Dodgson, Armaside, Cockermouth, for **Chapel House 2963**, born in 1920, bred by Thomas Teesdale, Chapel House, Ireby, Cumberland.

2870 **III. (£3.)**—Lord Leconsfield, Cockermouth Castle, Cumberland, for **Dash Newcastle 3966**, born in 1921.

2871 **R. N.**—Sir John H. Ramsden, Bart., Muncaster Castle, Ravenglass, Cumberland, for **Park.**

Class 354.—*Herdwick Shearling Rams.*

2879 **I. (£10.)**—S. D. Stanley-Dodgson, Armaside, Cockermouth, for **Double Chance.**

2876 **II. (£5.)**—Lord Leconfield, Cockermouth Castle, Cumberland, for **Dash Defiance.**

2878 **III. (£3.)**—Sir John F. Ramsden, Bart., Muncaster Castle, Ravenglass, for **Raven Crag.**

2877 **R. N.**—Sir John F. Ramsden, Bart., for **Chapel Hill.**

Class 355.—*Herdwick Shearling Ewes.*

2885 **I. (£10.)**—S. D. Stanley-Dodgson, Armaside, Cockermouth.

2883 **II. (£5.)**—Sir John F. Ramsden, Bart., Muncaster Castle, Ravenglass.

2880 **III. (£3)**, & 2881 **R. N.**—William John Kellett, Plas Newydd Farm, Ruthin.

Cheviots.

Class 356.—*Cheviot Rams, Two Shear and upwards.*[2]

2887 **I. (£10.)**—John Robson, Newton, Tarset, North Tyne, for ram, born in 1923, bred by John Robson, junr., Lynegar, Watten.

2886 **II. (£5.)**—J. T. and J. J. Dodd, Riccarton, Newcastleton, born in 1923.

2890 **III. (£3.)**—John Robson, junr., Lynegar, Watten, Caithness, for **Millknowe No Licence 4037**, born in 1923, bred by John Robson, Millknowe, Duns.

2889 **R. N.**—John Robson, junr., for **Millknowe £350.**

Class 357.—*Cheviot Shearling Rams.*

2893 **I. (£10)**, & 2892 **III. (£3.)**—John Robson, Newton, Tarset, North Tyne.

2895 **II. (£5.)**—John Robson, junr., Lynegar, Watten, Caithness, for **Lynegar Style.**

2891 **R. N.**—J. T. and J. J. Dodd, Riccarton, Newcastleton.

Class 358.—*Cheviot Shearling Ewes.*

2897 **I. (£10)**, & 2898 **II. (£5.)**—John Robson, Newton, Tarset, North Tyne.

2900 **III. (£3)**, & 2899 **R. N.**—John Robson, junr., Lynegar, Watten, Caithness.

Black-Faced Mountain.

Class 359.—*Black-faced Mountain Rams, Shearling and upwards.*

2908 **I. (£10.)**—Octavius Monkhouse, Cowshill, Wearhead, Co. Durham, for **Sunbeam**, born in 1921.

2901 **II. (£5.)**—Captain T. S. Christie, Wardrew, Gilsland, via Carlisle, for **Dandy Dinmont 551**, born in 1922, bred by J. Robson, Newton, Tarset.

2905 **III. (£3.)**—James Deuchar, Middleton, Wooler, for ram, born in 1923, bred by Charles Cadzow, Weston, Lanarkshire.

2911 **IV. (£2.)**—John Robson, Newton, Tarset, North Tyne.

H. C.—2907.

Class 360.—*Black-faced Mountain Shearling Ewes.*

2915 **I. (£10.)**—John Robson, Newton, Tarset, North Tyne.

2913 **II. (£5)**, & 2912 **III. (£3.)**—Octavius Monkhouse, Cowshill, Wearhead, Co. Durham.

Welsh Mountain.

Class 361.—*Welsh Mountain Rams, Two Shear and upwards.*[3]

2920 **I. (£10.)**—Major Eric J. W. Platt, Madryn Farm, Aber, North Wales, for **Plasnewydd Jonah E.G. 3 1386**, born in 1923, bred by Lt.-Col. E. W. Griffith, Plas Newydd, Trefnant.

2923 **II. (£5.)**—University College of North Wales, College Farm, Aber, Bangor, for **Nantyrharn O. 2 1242**, born in 1922, bred by the late Owen Price, Nantyrharn, Cray, Brecon.

2916 **III. (£3.)**—Captain W. Best, Vivod, Llangollen, for **Vivod P. 4 1295**, born in 1923.

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[1] Prizes given by the Herdwick Sheep Breeders' Association.

[2] Prizes given by the Cheviot Sheep Society.

[3] Prizes, except Fourth, given by the Welsh Mountain Flock Book Society.

2918 **IV. (£2.)**—Thomas Ellis, Penyfed, Tynant, Corwen, for **Penyfed P. 1 1344**, born in 1923, bred by Robert Roberts, Arllen Vawr, Llangynnog.
2922 **R. N.**—Robert Ivor Roberts, Dyserth Hall, Flint, for **Dyserth Spotyn Du.**

Class 362.—*Welsh Mountain Shearling Rams.*

2926 **I. (£10.)**—Major J. J. P. Evans, Lovesgrove Farm, Llanbadarn, Aberystwyth, for **Plynlyman Speculation.**
2934 **II. (£5.)**—University College of North Wales, College Farm, Aber, Bangor, for **Snowdon S. 15.**
2935 **III. (£3.)**—University College of North Wales, for **Snowdon S. 23.**
2931 **IV. (£2.)**—Major Eric J. W. Platt, Madryn Farm, Aber, North Wales, for **Madryn S. 7.**
2928 **V. (£1.)**—Lt.-Col. E. W. Griffith, Plasnewydd, Denbigh, for **Plasnewydd Dick 1653.**
2933 **R. N.**—Robert Ivor Roberts, Dyserth Hall, Flint, for **Dyserth Brenin S. 7.**
H. C.—2932.

Class 363.—*Welsh Mountain Ram Lambs.*

2947 **I. (£10.)**—Robert Ivor Roberts, Dyserth Hall, Flint.
2946 **II. (£5.)**—Major Eric J. W. Platt, Madryn Farm, Aber, North Wales.
2944 **III. (£3.)**—Richard Lloyd, Gilddaugoad Farm, Tremeirchion, St. Asaph.
2948 **IV. (£2)**, & 2949 **V. (£1.)**—University College of North Wales, College Farm, Aber, Bangor.
2940 **R. N.**—Major J. J. P. Evans, Lovesgrove Farm, Llanbadarn, Aberystwyth.
H. C.—2937.

Class 364.—*Welsh Mountain Ewes, Two Shear and upwards, with lambs at foot.*

2950 **I. (£10.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont., for **Royal Record**, born in 1920.
2954 **II. (£5.)**—Lt.-Col. E. W. Griffith, D.S.O., Plasnewydd, Denbigh, for **Plasnewydd P. 45.**
2955 **III. (£3.)**—Major Eric J. W. Platt, Madryn Farm, Aber, North Wales, for **Madryn N. 28**, born in 1922.
2957 **IV. (£2.)**—University College of North Wales, College Farm, Aber, Bangor, for **Snowdon P. 61**, born in 1923.
2953 **R. N.**—Major J. J. P. Evans, Lovesgrove Farm, Llanbadarn, Aberystwyth, for **Dyserth.**

Class 365.—*Three Welsh Mountain Shearling Ewes.*

2964 **I. (£10.)**—Major Eric J. W. Platt, Madryn Farm, Aber, North Wales, for ewes, bred by G. S. Gratton, Brynewnin, Rhuddlan.
2961 **II. (£5.)**—Major J. J. P. Evans, Lovesgrove Farm, Llanbadarn, Aberystwyth, for ewes, bred by D. W. Morris, Penywern, Talybont.
2969 **III. (£3)**, & 2968 **IV. (£2.)**—University College of North Wales, College Farm, Aber, Bangor.
2965 **R. N.**—Major Eric J. W. Platt.
H. C.—2967.

Class 366.—*Three Welsh Mountain Ewe Lambs.*

2972 **I. (£10.)**—Major J. J. P. Evans, Lovesgrove Farm, Llanbadarn, Aberystwyth.
2973 **II. (£5.)**—Lt.-Col. E. W. Griffith, D.S.O., Plasnewydd, Denbigh.
2970 **III. (£3.)**—Major W. Marshall Dugdale, D.S.O., Llwyn, Llanfyllin, Mont.
2976 **R. N.**—University College of North Wales, College Farm, Aber, Bangor.
H. C.—2975.

Black Welsh Mountain.

Class 367.—*Black Welsh Mountain Shearling Rams.*

2979 **I. (£10.)**—Alfred E. W. Darby, Adcote, Shrewsbury.
2981 **II. (£5)**, & 2980 **III. (£3.)**—Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.
2983 **R. N.**—Major-Gen. Lord Treowen, C.B., C.M.G., Llanover, Abergavenny, for **Llanover Tim.**

Class 368.—*Black Welsh Mountain Shearling Ewes.*[1]

2989 **I. (£10.)**—Mrs. F. H. T. Jervoise, Herriard Park, Basingstoke.
2985 **II. (£5)**, & 2986 **R. N.**—Alfred E. W. Darby, Adcote, Shrewsbury.
2990 **III. (£3.)**—Major-Gen. Lord Treowen, C.B., C.M.G., Llanover, Abergavenny.

PIGS.

Large Whites.

Class 369.—*Large White Boars, born in or before* 1923.

3006 **I. (£10.)**—Edmund Wherry, Bourne, Lincs, for **Bourne King David 36437** (T. N. 4402), born July 1, 1921; *s.* Bourne King John 26091, *d.* Bourne Queen 26th 65034 *by* Bourne Bar-None 20847.

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[1] Prizes given by the Black Welsh Mountain Sheep Breeders' Association.

2999 **II. (£5.)**—George J. Harris, Armadale, Hereford, for **Bourne Jay 3rd** 40497 (T.N. 5235), born June 4, 1923, bred by Edmund Wherry, Bourne; *s.* Bourne Jay 36435, *d.* Bourne Beauty 7th 64886 *by* Bourne King John 26091.

2998 **III. (£3.)**—Ernest Harding, Packwood Grange, Dorridge, Warwickshire, for **Bourne King David 29th** 40541 (T.N. 5286), born July 2, 1923, bred by Edmund Wherry, Bourne; *s.* Bourne King David 36437, *d.* Bourne Bonetta 6th 76950 *by* Baron of Bourne 28633.

2997 **IV. (£2.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Barfield Banner** 40099 (T.N. 43), born Jan. 14, 1923, bred by William Wright and Sons (York), Ltd., Goodramgate, York; *s.* Tockwith Banner 34241, *d.* Tockwith Marie 3rd 81484 *by* Turk of Doggartland 27433.

3003 **V. (£1.)**—George Payne, Wentworth, Elmesthorpe, Leicestershire, for **Bourne King David 12th** 40515 (T.N. 5222), born June 1, 1923, bred by Edmund Wherry, Bourne; *s.* Bourne King David 36437, *d.* Bourne Bonetta 9th 88828 *by* Baron of Bourne 28633.

2993 **R.N.**—Chivers and Sons, Ltd., Histon, Cambridge, for **Histon Wonder.**

H.C.—3002.

Class 370.—*Large White Boars, born in* 1924, *before July* 1.

3016 **I. (£10, Champion,[1] & Champion.[2])**—Edmund Wherry, Bourne, Lincs, for **Bourne King David 53rd** 47551 (T.N. 5500), born Jan. 5; *s.* Bourne King David 36437, *d.* Worsley Lady 32nd 62208 *by* Jay of Worsley 20th 16147.

3014 **II. (£5, & R. N. for Champion.[1])**—George Payne, Wentworth, Elmesthorpe, Leicestershire, for **Wentworth Lion 18th** 49803 (T.N. 62), born Feb. 23; *s.* Wentworth Lion 42851, *d.* Bourne Bonetta 33rd 103310 *by* Bourne Champion Boy 33091.

3012 **III. (£3.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Bourne King David 52nd** 47549 (T.N. 5499), born Jan. 5, bred by Edmund Wherry, Bourne, Lincs; *s.* Bourne King David 36437, *d.* Worsley Lady 32nd 62208 *by* Jay of Worsley 14th 16149.

3015 **R. N.**—Lady Seeley, Sherwood Lodge, Arnold, Notts, for **Sherwood Caligulie.**

H. C.—3013.

Class 371.—*Large White Boars, born in* 1924, *on or after July* 1.[3]

3026 **I. (£10.)**—Edmund Wherry, Bourne, Lincs, for **Bourne Bradbury 4th** 47451 (T.N. 5724) born July 6; *s.* Bourne Bradbury 40429, *d.* Bourne Queen 39th 88990 *by* Bourne Bar-None 20847.

3021 **II. (£5.)**—R. P. Haynes, Delves Green Farm, Wednesbury, for **Moreton Jay** (T. N. 257), born Aug. 6, bred by R. G. Peel, Moreton Hall, Congleton; *s.* Taunton Jay 22nd, *d.* Moreton Molly *by* Caldmore Banner 4th 36569.

3022 **III. (£3.)**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Aldenham Bellringer 23rd** (T.N. 788), born July 6; *s.* Aldenham Berthas Boy 2nd 39923, *d.* Aldenham Bell 24th 102320 *by* Spalding Banner 7th 34093.

3025 **IV. (£2.)**—Lady Seeley, Sherwood Lodge, Arnold, Notts, for **Bourne Bradbury 6th** 47455 (T.N. 726), born July 6, bred by Edmund Wherry, Bourne, Lincs; *s.* Bourne Bradbury 40429, *d.* Bourne Queen 39th 88990 *by* Bourne King John 26091.

3017 **R. N.**—Archer Bellwood, Mount Pleasant, Kirton Lindsey, Lincs, for **Bourne Bradbury 5th.**

Class 372.—*Large White Boars, born in* 1925.

3059 **I. (£10.)**—Edmund Wherry, Bourne, Lincs, for **Bourne Baldwin** (T.N. 5891), born Jan. 5; *s.* Bourne King David 30th 40543, *d.* Bourne Bonetta 25th 103296 *by* Bourne Bar-None 125th 28835.

3034 **II. (£5.)**—Daniel R. Daybell, Bottesford, Nottingham, for boar (T.N. 688), born Jan. 4; *s.* Worsley Jay 87th 27619, *d.* Empress of Clifton 52482 *by* Worsley Turk 83rd 21609.

3061 **III. (£3.)**—W. White & Sons, Pool Farm, Taunton, for **Taunton Jay 38th** (T.N. 676), born Jan. 1; *s.* Caldmore Jay 36575, *d.* Taunton Amy 11th 93086 *by* Taunton Araby 3rd 27325.

3060 **IV. (£2.)**—Edmund Wherry, for **Bourne Birkenhead** (T.N. 5893), born Jan. 5; *s.* Bourne King David 30th 40543, *d.* Bourne Bonetta 25th 103296 *by* Bourne Bar-None 125th 28835.

3040 **V. (£1.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Bogrough Turk 2nd** (T.N. 39), born Jan. 3, bred by T. B. Blackshaw, Hurst Farm, Appleton, Chester; *s.* Worsley Turk 167th 27705, *d.* Bogrough Primrose *by* Friar of Walton 36987.

3032 **R. N.**—Daniel R. Daybell.

H. C.—3036, 3052.

Class 373.—*Large White Breeding Sows, born in or before* 1923.

3073 **I. (£10, R. N. for Champion,[2] & Champion.[4])**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Cantab Maid Matilda** 89286 (T.N. 277), born Jan. 5, 1921, farrowed March 24, bred by Cambridge University School of Agriculture, Gravel Hill, Cambridge; *s.* Bourne Cantab 26069, *d.* Cantab May Maid 52892 *by* Histon Cantab 24015.

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[1] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Large White Boar in Classes 369 to 372.

[2] Silver Challenge Cup, value Thirty Guineas, given by the National Pig Breeders' Association, for the best Large White Pig in Classes 369 to 375.

[3] Prizes, except Fourth, given by the National Pig Breeders' Association.

[4] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Large White Sow in Classes 373 to 375.

3076 **II. (£5.)**—Edmund Wherry, Bourne, Lincs, for **Bourne Lady Superior** 88958 (T.N. 4464), born July 10, 1921, farrowed Feb. 24; *s.* Bourne Bar-None 125th 28835, *d.* Worsley Lady 32nd 62208 *by* Jay of Worsley 14th 16147.

3070 **III. (£3.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Ford Belle 9th** 105124 (T.N. 374), born Jan. 16, 1923, farrowed Jan. 15, bred by T. G. Williams, The Ship, Walton, Warrington; *s.* Ford Hercules 33483, *d.* Ford Belle 7th 78614 *by* Hercules of Walton 9th 23995.

3063 **IV. (£2.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Histon Belle 63rd** 105958 (T.N. 1791), born July 8, 1921, farrowed Feb. 15; *s.* Histon Snowman 24047, *d.* Histon Belle 53908 *by* Jay of Wyboston 16149.

3064 **V. (£1.)**—A. Colegate, The Pole, Antrobus, Northwich, for **Bryngwyn Merry** 65448 (T.N. 10), born Aug. 21, 1920, farrowed April 15, bred by Lt.-Col. Sir Reginald Rankin, Bart., Bryngwyn, Hereford; *s.* Emperor Worsley 11th 26409, *d.* Grantham Gay Lady 2nd 59502 *by* Gunner of Grantham 21119.

3069 **R. N.**—Thomas Eastwood, junr., Heath Hey, Hooton, Cheshire, for **Hallastone Sylvia 4th.**

H. C.—3072.

Class 374.—*Large White Sows, born in* 1924, *before July* 1.

3097 **I. (£10, & R. N. for Champion.[1])**—Edmund Wherry, Bourne, Lincs, for **Bourne Beatrice 181st** (T.N. 5508), born Jan. 6; *s.* Bourne King David 36437, *d.* Beatrice of Bourne 103054 *by* Bourne Big Ben 26th 28845.

3094 **II. (£5.)**—Robert Graham Peel, Moreton Hall, Congleton, for **Moreton Muriel 4th** (T.N. 150), born Jan. 17; *s.* Caldmore Banner 4th 36569, *d.* Muriel of Moreton 68830 *by* Cholmondeley Jay 26247.

3089 **III. (£3.)**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford, for **Aldenham Bonnie Queen** (T.N. 670), born Feb. 4; *s.* Turk of Aldenham 37811, *d.* Aldenham B.Q. 88250 *by* Bourne Cantab 26069.

3098 **IV. (£2.)**—Edmund Wherry, for **Bourne Beatrice 183rd** 128236 (T.N. 5510), born Jan. 6; *s.* Bourne King David 36437, *d.* Beatrice of Bourne 103054 *by* Bourne Big Ben 26th 28845.

3083 **V. (£1.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Walton Sunshine 3rd** 132220 (T.U.488), born Jan. 6; *s.* Nonsuch of Walton 2nd 4197, *d.* Sunshine of Walton 109224 *by* Shipley Major 30411.

3084 **R. N.**—Sir Gilbert Greenall, Bart., C.V.O., for **Walton Sunshine 4th.**

H. C.—3090.

Class 375.—*Large White Sows, born in* 1924, *on or after July* 1.

3120 **I. (£10.)**—Wm. Wright & Sons (York), Ltd., 9 Goodramgate, York, for **Barfield Queen 2nd** (T.N. 169), born July 3; *s.* Bourne Bar-None 290th 40353, *d.* Barfield Queen 102994 *by* Tockwith Banner 34241.

3118 **II. (£5.)**—Wm. Wright & Sons (York), Ltd., for **Barfield Lady** (T.N. 163), born July 2; *s.* Barfield Statesman, *d.* Bourne Lady 21st 103456 *by* Bourne Bar-None 125th 28835.

3116 **III. (£3.)**—Edmund Wherry, Bourne, Lincs, for **Bourne Bonetta 88th** 128282 (T.N. 5737), born July 7; *s.* Broker of Bourne 40617, *d.* Bourne Bonetta 31st 103306 *by* Bourne Champion Boy 33091.

3107 **IV. (£2.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Walton Mary 3rd** (T.N. 788), born July 3; *s.* Nonsuch of Walton 2nd 41971, *d.* Mary of Walton 107066 *by* Worsley Jay 109th 34479.

3106 **V. (£1.)**—Sir Gilbert Greenall, Bart., C.V.O., for **Ford Primrose 7th** (T.N. 476), born July 31, bred by T. G. Williams, The Ship, Walton, Warrington; *s.* Worsley Turk 167th 27705, *d.* Ford Primrose 3rd 78620 *by* Emperor of Walton 4th 26403.

3119 **R.N.**—Wm. Wright & Sons (York), Ltd., for **Barfield Princess 2nd.**

H. C.—3103, 3115, 3117. **C.**—3104, 3108.

Class 376.—*Two Large White Sows, born in* 1925.

3138 **I. (£10.)**—Edmund Wherry, Bourne, Lincs, for **Bourne Champion Queen 60th** (T.N. 5887) and **Bourne Champion Queen 61st** (T.N. 5888), born Jan. 3; *s.* Bourne King David 30th 40543, *d.* Bourne Champion Queen 5th 76980 *by* Sapperton Boy 24471.

3126 **II. (£5.)**—Sir Gilbert Greenall, Bart., C.V.O., Walton Hall, Warrington, for **Walton Primrose 42nd & 43rd** (T.N. 33 and 34), born Jan. 10; *s.* Boxted Turk 33117, *d.* Duston Primrose 2nd 78326 *by* Dollar of Duston 29285.

3122 **III. (£3.)**—Peter Bostock, The Pitts, Cuddington, Malpas, for **Cuddington North Lassie 3rd & 4th** (T.N. 10 and 13), born Jan. 3; *s.* Bushes John, *d.* Brampton Lassie 6th 77162 *by* Victor of Brampton 30761.

3125 **IV. (£2.)**—Sir Gilbert Greenall, Bart., C.V.O., for **Walton Sunshine 7th & 9th** (T.N. 12 and 13), born Jan. 3; *s.* Barfield Banner 40099, *d.* Sunshine of Walton 109224 *by* Shipley Major 30411.

3129 **V. (£1.)**—Ernest Harding, Packwood Grange, Dorridge, Warwickshire, for **Packwood Sally 40th** (T.N. 1810) and **Packwood Sally 41st** (T.N. 1811), born Jan. 1; *s.* Bourne David 29th 40541, *d.* Packwood Sally 20th 80158 *by* Bourne Bar-None 86th 28787.

3121 **R. N.**—Archer Bellwood, Mount Pleasant, Kirton Lindsey, Lincs., for **Kirton Lady 18th and 20th.**

H. C.—3134, 3137. **C.**—3135.

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[1] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Large White Sow in Classes 373 to 375.

Middle Whites.

Class 377.—*Middle White Boars, born in or before* 1923.

3145 **I. (£10, Champion,[1] & R. N. for Champion.[2])**—CHIVERS & SONS, LTD., Histon, Cambridge, for **Wratting Woodman** 35957 (T.N. 2), born June 18, 1921, bred by F. Sainsbury, Blunts Hall, Little Wratting; *s.* Histon Woodman 28099, *d.* Histon Choice 19th 84576 *by* Shrewsbury 19511.

3163 **II. (£5.)**—CHARLES SPENCER, Milpond, Little Oakley, Harwich, for **Holywell Peter** 50301 (T.N. 551), born June 2, 1923; *s.* Holywell Oakley 44695, *d.* Holywell Pet 97490 *by* Histon Milpond 35161.

3144 **III. (£3.)**—A. W. C. BUTLER, Stud Farm, Finstall, Bromsgrove, for **Don of Wishaw** 38469 (T.N. 0115), born Aug. 19, 1921, bred by H. H. Coldwell Horsfall, Erdington; *s.* Bilton of Rickerscote 31285, *d.* Rickerscote Ruby 3rd 74954 *by* Wharfedale Revel 25661.

3150 **IV. (£2.)**—W. HALLAS, Bank House Farm, Helsby, for **Squire of Morpeth** 35781 (T.N. 90), born Dec. 16, 1920, bred by Wharncliffe War Hospital, Sheffield; *s.* Bobby of Wharncliffe 31301, *d.* Wharncliffe Pattie 3rd 63860 *by* Pendley of Wharncliffe 28223.

3156 **V. (£1.)**—LEOPOLD C. PAGET, Middlethorpe Hall, York, for **Wharfedale Jerry** 51689 (T.N. 332), born July 27, 1922; *s.* Wharfedale Neptune 35897, *d.* Wharfedale Radiance 87772 *by* Wharfedale Deliverance 32575.

3158 **R. N.**—W. R. PARTRIDGE, The Manor House, Woodmancote, Cirencester, for **Histon Proud Boy.**

H. C.—3141, 3159, 3161. **C.**—3167.

Class 378.—*Middle White Boars, born in* 1924, *before July* 1.

3177 **I. (£10, & R.N. for Champion.[1])**—LEOPOLD C. PAGET, Middlethorpe Hall, York, for **Wharfedale Clinker** 51673 (T.N. 645), born Jan. 18; *s.* Illuminator of Wharfedale 44935, *d.* Wharfedale Phosphorine 126412 *by* Wharfedale Neptune 35897.

3175 **II. (£5.)**—MRS. VICTOR HAYWARD, Bookham Grove, Great Bookham, for **Bookham Super Tax** (T.N. 375), born Jan. 12; *s.* Caldmore Super Tax 43545, *d.* Beenham Choice 94432 *by* Pendley of Beenham 35555.

3172 **III. (£3.)**—W. J. EDKINS, Langley Gorse, Walmley, Birmingham, for **Wishaw Don** 51823 (T.N. 66), born Feb. 2; *s.* Don of Wishaw 38469, *d.* Wishaw Grace 2nd 87880 *by* Sheffield 32353.

3171 **IV. (£2.)**—F. N. BLUNDELL, Crosby Hall, Blundellsands, Liverpool, for **Mistley Hearty** (T.N. 23), born Jan. 9, bred by Brig.-Gen. B. Atkinson, C.B., C.M.G., Mistley Hall, Manningtree; *s.* Mistley Miller 45369, *d.* Mistley Harthay 3rd 98818 *by* Wharfedale Frost 32579.

3176 **V. (£1.)**—THE MARQUESS OF LONDONDERRY, K.G., P.C., Plas Machynlleth, Machynlleth, for **Histon Woodman 23rd** (T.N. 712), born Jan. 5, bred by Chivers & Sons, Ltd., Histon, Cambridge; *s.* Wratting Woodman 35957, *d.* Histon Prudence 5th 84692 *by* Histon Rover 28075.

3173 **R. N.**—LORD GLANELY, Lackham, Lacock, Wilts, for **Lackham Wireless.**

H. C.—3181.

Class 379.—*Middle White Boars, born in* 1924, *on or after July* 1.[3]

3201 **I. (£10.)**—LEOPOLD C. PAGET, Middlethorpe Hall, York, for **Wharfedale Touchstone** 51785 (T.N. 683), born July 2; *s.* Tramp of Wharfedale 46649, *d.* Wharfedale Saphira 101494 *by* Wharfedale Frost 32579.

3211 **II. (£5.)**—MRS. SOFER WHITBURN, Amport, Andover, for **Amport Scotty** (T.N. 665), born July 3; *s.* Scotty of Norsbury 46323, *d.* Yateley Medina 127256 *by* Norsbury Valour 32099.

3208 **III. (£3.)**—CHARLES SPENCER, Milpond, Little Oakley, Harwich, for **Holywell Pal** (T.N. 648), born July 27; *s.* Holywell Paragon 44697, *d.* Mistley Harthay 9th 98824 *by* Mistley Sundon 35449.

3185 **IV. (£2.)**—COMMANDER and MRS. BOULNOIS, The Navy Pig Farm, Yateley, Hants, for **Yateley Salopian 2nd** (T.N. 368), born July 5; *s.* Salopian of Prestwood 32315, *d.* Beenham Halfa 2nd 71820 *by* Hope of Hammonds 25361.

3207 **V. (£1.)**—MRS. HAYES SADLER, Little Hallingbury Park, Bishops Stortford, for **Norsbury Scotty 5th** (T.N. 289), born Sept. 9; *s.* Norsbury Scotty 3rd 45561, *d.* Pendley Perfection 25th 121974 *by* Hawthorn Sultan 38741.

3189 **R. N.**—CHIVERS & SONS, LTD., Histon, Cambridge, for **Histon Rover 63rd.**

H. C.—3192, 3196. **C.**—3190 3200.

Class 380.—*Middle White Boars, born in* 1925.

3240 **I. (£10.)**—MRS. SOFER WHITBURN, Amport, Andover, for boar (T.N. 773), born Jan. 1; *s.* Histon Rover 50th 44585, *d.* Amport Cameo 4th *by* Wharfedale Jamieson 3rd 28341.

3229 **II. (£5.)**—LEOPOLD C. PAGET, Middlethorpe Hall, York, for **Wharfedale Headlight** (T.N. 843), born Jan. 11; *s.* Illuminator of Wharfedale 44935, *d.* Wharfedale Zeresh 101430 *by* Wharfedale Deliverance 32575.

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[1] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Middle White Boar in Classes 377 to 380.

[2] Silver Challenge Cup, value Thirty Guineas, given by the National Pig Breeders' Association, for the best Middle White Pig in Classes 377 to 383.

[3] Prizes, except Fourth and Fifth, given by the National Pig Breeders' Association.

3216 **III. (£3.)**—Commander and Mrs. Boulnois, The Navy Pig Farm, Yateley, Hants, for boar (T.N. 506), born Jan. 6; *s.* Yateley Hannibal, *d.* Yateley Niobe 2nd *by* Norsbury Valour 32099.

3236 **IV. (£2.)**—Charles Spencer, Milpond, Little Oakley, Harwich, for **Holywell Pasha** (T.N. 683), born Jan. 25; *s.* Holywell Oakley 44695, *d.* Holywell Pattie 97484 *by* Histon Milpond 35161.

3220 **V. (£1.)**—Lord Glanely, Lackham, Lacock, Wilts, for **Lackham Guard** (T.N. 380), born Jan. 6; *s.* Histon Rover 38th 44561, *d.* Norsbury Hansom 120888 *by* Norsbury Hero 32093.

3217 **R. N.**—A. Denham, Lower Crows Nest Farm, Lightcliffe, Halifax, for **Lightcliffe Hermes.**
H. C.—3215, 3222, 3230, 3234. **C.**—3218, 3219, 3238, 3239.

Class 381.—*Middle White Breeding Sows, born in or before* 1923.

3260 **I. (£10, Champion,[1] & Champion.[2])**—Leopold C. Paget, Middlethorpe Hall, York, for **Holywell Pamela 117694** (T.N. 517), born Aug. 8, 1922, farrowed March 25, bred by Charles Spencer, Milpond, Little Oakley, Harwich; *s.* Histon Milpond 35161, *d.* No. 1 of Harthay 51682 *by* Holywell Durbar 23141.

3252 **II. (£5.)**—W. Hallas, Bank House Farm, Helsby, Cheshire, for **Morpeth Jewel 85980** (T.N. 159), born April 24, 1921, farrowed Jan. 4, bred by A. Grix, Whalton, Morpeth; *s.* Peene Gunner 28201, *d.* Beechcroft Hope 62472 *by* Rickerscote Juggler 25525.

3259 **III. (£3.)**—Ralph A. S. Mitchison, Pullington, Benenden, Cranbrook, for **Pullington Pamela 122628** (T.N. 302), born Jan. 1, 1923, farrowed Feb. 14; *s.* Sunhill Swell 35807, *d.* Houden Patricia 56804 *by* Sundon M.E.E. 23231.

3247 **IV. (£2.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Hawthorn Lady Holly 2nd 116906** (T.N. 68), born Dec. 30, 1922, farrowed Jan. 14, bred by Hawthorn Herd, Ltd., The Hawthorns, Henley-on-Thames; *s.* Woodman of Hawthorn 39751, *d.* Hawthorn Holly 84300 *by* Histon Baron 31747.

3267 **V. (£1.)**—Mrs. Hayes Sadler, Little Hallingbury Park, Bishops Stortford, for **Parkhill Perfection 12th 99344** (T.N. 205), born Feb. 25, 1922, farrowed Feb. 20, bred by J. Clarke, Park Hill, Tring; *s.* Peene Park Keeper 35537, *d.* Park Hill Perfection 7th 86326 *by* Pendley Squire 25487.

3248 **R. N.**—Chivers & Sons, Ltd., for **Histon Welcome 19th.**
H. C.—3244, 3245, 3250, 3274. **C.**—3258, 3270.

Class 382.—*Middle White Sows, born in* 1924, *before July* 1.

3297 **I. (£10, & R. N. for Champion.[2])**—Arthur Leney, Salts Place, Loose, Kent, for **Salts Choice 2nd 141682** (T.N. 22), born Jan. 17; *s.* Wharncliffe Prince 32625, *d.* Oxney Choice 5th 121344 *by* Oxney Revel 35505.

3289 **II. (£5.)**—W. Hallas, Bank House Farm, Helsby, Cheshire, for **Hallastone Mona 2nd 136762** (T.N. 483), born Jan. 1; *s.* Candidate of Hallastone 44123, *d.* Chequer Mona 95126 *by* Histon Shrewsbury 9th 35179.

3287 **III. (£3.)**—Lord Glanely, Lackham, Lacock, Wilts, for **Lackham Rosadora 138510** (T.N. 236), born Jan. 1; *s.* Norsbury Vaughan 39201, *d.* Rosadora of Norsbury 123184 *by* Hiton Rover 28075.

3305 **IV. (£2.)**—Major Pigott & Partners, Hill Place Farm, Knaphill, Surrey, for **Hallastone Mona 4th 136766** (T.N. 484), born Jan. 1, bred by W. Hallas, Bank House Farm, Helsby; *s.* Candidate of Hallastone 44123, *d.* Chequer Mona 95126 *by* Histon Shrewsbury 9th 35179.

3309 **V. (£1.)**—Mrs. Hayes Sadler, Little Hallingbury Park, Bishops Stortford, for **Park Hill Perfection** (T.N. 295), born Jan. 21, bred by J. Clark, Park Hill, Tring; *s.* Park Hill Diamond 45787, *d.* Park Hill Perfection 12th 99344 *by* Peene Park Keeper 35537.

3286 **R. N.**—William H. Gilpin, Cobble Hall, Roundhay, Leeds, for **Wharfedale Rita.**
H. C.—3285, 3290, 3292, 3298, 3302. **C.**—3278, 3279, 3281 3283, 3288.

Class 383.—*Middle White Sows, born in* 1924, *on or after July* 1.

3321 **I. (£10.)**—Chivers & Sons, Ltd., Histon, Cambridge, for **Histon Rosadora 48th.** (T.N. 1069), born July 1; *s.* Histon Baron 31747, *d.* Histon Rosadora 8th 84694 *by* Histon Wanderer 25349.

3338 **II. (£5.)**—Leopold C. Paget, Middlethorpe Hall, York, for **Wharfedale Apple Blossom 143800** (T.N. 699), born July 5; *s.* Councillor of Wharfedale 46505, *d.* Southmore Raspberry 100644 *by* Southmore Chief 35769.

3337 **III. (£3.)**—Arthur Leney, Salts Place, Loose, Kent, for **Salts Bettina 2nd 141672** (T.N. 88), born Aug. 12; *s.* Councillor of Wharfedale, *d.* Wharfedale Bettina 87674 *by* Wharfedale Delightful 28335.

3344 **IV. (£2.)**—Mrs. Hayes Sadler, Little Hallingbury Park, Bishops Stortford, for **Norsbury Grace** (T.N. 145), born July 3; *s.* Brockencote Prince 6th 43457, *d.* Oaken Tonic 121196 *by* Rambler of Oaken 39343.

3352 **V. (£1.)**—Mrs. Sofer Whitburn, Amport, Andover, Hants, for **Amport Medina 2nd** (T.N. 667), born July 3; *s.* Scotty of Norsbury 46323, *d.* Yateley Medina 127256 *by* Norsbury Valour 32099.

3330 **R. N.**—Mrs. Victor Hayward, Bookham Grove, Great Bookham, for **Bookhm Bet.**
H. C.—3319, 3339, 3340. **C.**—3329, 3336, 3343.

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[1] Silver Challenge Cup, value Thirty Guineas, given by the National Pig Breeders' Association, for the best Middle White Pig in Classes 377 to 383.

[2] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association for the best Middle White Sow in Classes 381 to 383.

Class 384.—*Two Middle White Sows, born in* 1925.

3353 **I. (£10.)**—S. Bide & Sons, Ltd., Pedigree Pig Farm, Farnham, for sows (T.N. 419 and 421), born Jan. 4; *s.* Wharncliffe Master 46847, *d.* Atbara of Compton 111218 *by* Prestwood Royalist 32217.

3368 **II. (£5.)**—Mrs. Hayes Sadler, Little Hallingbury Park, Bishops Stortford, for sows (T.N. A 431 and A 432), born Jan. 7; *s.* Histon Milpond 35161, *d.* Beenham Hagar 3rd 82390 *by* Pendley Swell 32183.

3369 **III. (£3.)**—Mrs. Sofer Whitburn, Amport, Andover, Hants, for **Amport Peerless 5th & 6th** (T.N. 818 and 821), born Jan. 11; *s.* Histon Rover 50th 44585, *d.* Amport Peerless 3rd 133090 *by* Scotty Norsbury 46323.

3356 **IV. (£2.)**—Mrs. R. M. Foot, White Hill, Berkhamsted, for sows (T.N. 54 and 57), born Jan. 8; *s.* Hammonds Hasty 44349, *d.* Hammonds Choice 116534 *by* Wharfedale Hector 35879.

3362 **V. (£1.)**—Arthur Leney, Salts Place, Loose, Kent, for **Salts Diana** (T.N. 142) and **Salts Diana 2nd** (T.N. 145), born Jan. 3; *s.* Salts Admiral 46275, *d.* Sherenden Actress *by* Sherenden Imperative 39427.

3366 **R. N.**—Leopold C. Paget, Middlethorpe Hall, York.

H. C.—3357, 3359. **C.**—3354, 3358, 3360.

Tamworths.

Class 385.—*Tamworth Boars, born in or before* 1923.

3371 **I. (£10, & R. N. for Champion.[1])**—F. W. Holt, The Grove, Wishaw, Erdington, for **Knowle Joshua** 47131 (T.N. 540), born March 12, 1923, bred by the late R. Ibbotson, The Hawthorns, Knowle; *s.* Knowle Joseph 36009, *d.* Queen of Basildon 76252 *by* Whitacre Fireaway 25821.

3370 **II. (£5.)**—Charles L. Coxon, Milton, Pembridge, for **Milton Beau** (T.N. 144), born July 6, 1923; *s.* Roxley Exeter 36047, *d.* Beauty of Milton 76092 *by* Mons of Middleton 25775.

Class 386.—*Tamworth Boars, born in* 1924.[2]

3372 **I. (£10, Champion,[1] & Champion.[3])**—R. P. Haynes, Delves Green Farm, Wednesbury, Staffs, for **Red Chief of Caldmore** 51975 (T.N. 637), born Jan. 7, bred by the late R. Ibbotson, The Hawthorns, Knowle; *s.* Knowle Newcastle, *d.* Knowle Vesta 88134 *by* Knowle Bedford 32669.

3373 **II. (£5.)**—Arthur Owen Jones, Orford House, Croft, Warrington, for **Sunbeam Squire 2nd** (T.N. 44), born Jan. 4, bred by F. W. Holt, The Grove, Wishaw, Erdington; *s.* Knowle Bruce 36013, *d.* Knowle Queen Mary 88118 *by* Knowle Dreadnought 28419.

3377 **III. (£3.)**—Theo. A. Stephens, Frensham Manor, Farnham, Surrey, for **Neuburie Cayenne** (T.N. 165), born June 17, bred by Captain R. A. Angier, New Mousefield, Speen, Newbury; *s.* Knowle Bruce 36013, *d.* Knowle Venus 76210 *by* Basildon Max 25683.

3378 **R. N.**—The Exors. of the late Joshua Hirst Wheatley, Berkswell Hall, Coventry, for **Berkswell Brine.**

Class 387.—*Tamworth Boars, born in* 1925.

3381 **I. (£10.)**—F. W. Holt, The Grove, Wishaw, Erdington, for **Sunbeam Squire 3rd** (T.N. 79), born Jan. 20; *s.* Knowle Joshua 47131, *d.* Milton Pearl 127448 *by* Mons of Middleton 25775.

3380 **II. (£5.)**—F. W. Holt, for **Sunbeam Charlie** (T.N. 93), born Jan. 1; *s.* Sunbeam Squire 2nd, *d.* Sunbeam Ginger Jane *by* Whitacre Wanderer 39865.

3382 **III. (£3.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Basildon Newcastle** (T.N. 308), born Jan. 29; *s.* Milton Bishop 2nd 36041, *d.* Basildon Marigold *by* Knowle Newcastle 47143.

3384 **R. N.**—Theo. A. Stephens, Frensham Manor, Farnham, Surrey.

H. C.—3383.

Class 388.—*Tamworth Breeding Sows, born in or before* 1923.

3391 **I. (£10, R. N. for Champion,[3] & Champion.[4])**—Theo. A. Stephens, Frensham Manor, Farnham, Surrey, for **Knowle Felicity** 127406 (T.N. 501), born Oct. 10, 1922, farrowed Jan. 13, bred by the late R. Ibbotson, The Hawthorns, Knowle, Dorridge; *s.* Knowle Redstar 32713, *d.* Knowle Favourite 2nd 76160 *by* Basildon Max 25683.

3387 **II. (£5.)**—F. W. Holt, The Grove, Wishaw, Erdington, for **Milton Pearl** 127448 (T.N. 80), born Jan. 2, 1922, farrowed Jan. 20, bred by C. L. Coxon, Milton, Pembridge; *s.* Mons of Middleton 25775, *d.* Middleton Mainz 57614 *by* Mitcheldene of Middleton 23343.

3389 **III. (£3.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Basildon Barbara** 101966 (T.N. 175), born Jan. 2, 1922, farrowed Jan. 5; *s.* Knowle Darlington 32687, *d.* Beauty of Milton 76090 *by* Mons of Middleton 25775.

3392 **R. N.**—Theo. A. Stephens, for **Knowle Virtue.**

H. C.—3386.

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[1] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Tamworth Boar in Classes 385 to 387.

[2] Prizes given by the National Pig Breeders' Association.

[3] Silver Challenge Cup, value Thirty Guineas, given by the National Pig Breeders' Association, for the best Tamworth Pig in Classes 385 to 389.

[4] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Tamworth Sow in Classes 388 and 389.

Class 389.—*Tamworth Sows, born in* 1924.

3394 **I. (£10, & R. N. for Champion.[1])**—F. W. Holt, The Grove, Wishaw, Erdington, for **Sunbeam Sunstar 2nd** (T.N. 49), born Jan. 4; *s.* Knowle Bruce 36013, *d.* Knowle Queen Mary 98118 *by* Knowle Dreadnought 28419.

3401 **II. (£5.)**—The Exors. of the late Joshua Hirst Wheatley, Berkswell Hall, Coventry, for **Berkswell Jenny** 144698 (T.N. 33), born May 28, bred by the late J. H. Wheatley; *s.* Knowle Newcastle 47143, *d.* Jemima of Berkswell 102046 *by* Pulley Marcus 32749.

3393 **III. (£3.)**—F. W. Holt, for **Milton Beauty 10th** 144760 (T.N. 158), born Jan. 10, bred by C. L. Coxon, Milton, Pembridge; *s.* Roxley Exeter 36047, *d.* Beauty of Milton 2nd 76092 *by* Mons of Middleton 25775.

3399 **R. N.**—J. A. H. Stansfeld, Bates, Wittersham, Kent, for **Oxney Golden Queen.**

H. C.—3397.

Class 390.—*Two Tamworth Sows, born in* 1925.

3403 **I. (£10.)**—F. W. Holt, The Grove, Wishaw, Erdington, for **Sunbeam Pearl 1st & 2nd** (T.N. 80 and 82), born Jan. 20; *s.* Knowle Joshua 47131, *d.* Melton Pearl 127448 *by* Mons of Middleton 25775.

3402 **II. (£5.)**—F. W. Holt, for sows (T.N. 92 and 94), born Jan. 1; *s.* Sunbeam Squire 2nd, *d.* Sunbeam Ginger Jane *by* Whitacre Wanderer 39865.

3404 **III. (£3.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for sows (T.N. 327 and 328), born Jan. 29; *s.* Milton Bishop 2nd 36041, *d.* Basildon Marigold *by* Knowle Newcastle 47143.

3406 **R. N.**—Theo. A. Stephens, Frensham Manor, Farnham, for **Hookstile Amy and Hookstile Anne.**

H. C.—3407.

Berkshires.

Class 391.—*Berkshire Boars, born in or before* 1923.

3414 **I. (£10, Champion,[2] & Champion.[3])**—John D. Player, Lenton Hurst, Nottingham, for **Leadenham Duke** B. 748, born Jan. 15, 1923, bred by Captain J. S. Reeve, Leadenham House, Lincoln; *s.* Pamber Paragon 23411, *d.* Leadenham Turvey 5th 25938 *by* Manor Robert 22770.

3412 **II. (£5.)**—J. T. Eason, Woodhouse Farm, Smannell, Andover, for **Woodhouse Boniface** B. 1013, born July 28, 1923; *s.* Dunmanor Acme B. 429, *d.* Dunmanor Agnes 3rd 25484 *by* Iwerne Nonsuch 23375.

3413 **III. (£3.)**—T. L. Martin, Ashe Warren, Overton, Hants, for **Suddon Monty** B. 337, born March 20, 1922, bred by J. Fricker, Marsh Farm, Stalbridge, Dorset; *s.* Heale War Lunid 24172, *d.* Princess Royal 5th 19695 *by* Motcombe Cognac 16605.

3416 **IV. (£2.)**—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield Royal Pygmalion 3rd** B. 852, born Sept. 8, 1923; *s.* Pygmalion 19872, *d.* Highfield Princess Royal 4th S. 1405 *by* Pamber President 22702.

3417 **R. N.**—J. E. Triffitt, 1a St. Oswald's Road, York, for **Highfield Marina President 2nd.**

C.—3411.

Class 392.—*Berkshire Boars, born in* 1924, *before July* 1.

3419 **I. (£10, & R. N. for Champion.[2])**—Major Clive Behrens, Swinton Grange, Malton, for **Swinton President** B. 1135, born Jan. 8; *s.* Highfield Royal President B. 338, *d.* Swinton Margaret S. 2216 *by* Basildon Rubin 24670.

3422 **II. (£5).**—Hon. Mrs. Bruce Ward, Godinton, Ashford, Kent, for **Highfield Marina President 5th** B. 1303, born March 29, bred by Frank Townend, Highfield, Moor Allerton, Leeds; *s.* Highfield Royal President 2nd B. 339, *d.* Highfield Marina 2nd S. 1402 *by* Pamber President 22702.

3418 **III. (£3.)**—Colonel H. Lyon Anderton, Ingmanthorpe Hall, Wetherby, for **Ingmanthorpe Conqueror 1st** B. 1265, born Jan. 9; *s.* Highfield Royal President 3rd B. 340, *d.* Highfield Marina 3rd S. 1403 *by* Pamber President 22702.

3420 **R. N.**—W. A. Bindley, Pamington Court Farm, Tewkesbury, for **Pamington Rupert.**

Class 393.—*Berkshire Boars, born in* 1924, *on or after July* 1.[4]

3428 **I. (£10.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Manor Referee**, born July 12, bred by Arthur Hiscock, Manor Farm, Blandford; *s.* Manor Premier 25187, *d.* Basildon Virtue 14th S. 1379 *by* Hurry Onward 22033.

3431 **II. (£5.)**—J. E. Triffitt, 1a St. Oswald's Road, York, for **Fulford Futurist** B. 1284, born July 30; *s.* Rudgate Pygmalion B. 901, *d.* Suddon Bridget 25999 *by* Suddon Kingmaker 25998.

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[1] Champion Gold Medal, value £5 5*s.*, given by the National Pig Breeders' Association, for the best Tamworth Sow in Classes 388 and 389.

[2] Challenge Cup, value Twenty Guineas, given by the British Berkshire Society for the best Berkshire Boar in Classes 391 to 394.

[3] The "Eaton" Silver Challenge Cup, value Fifty Guineas, given through the British Berkshire Society, for the best Boar or Sow in Classes 391 to 397. A Gold Medal was given by the British Berkshire Society to the Breeder of this Champion Pig.

[4] Prizes given by the British Berkshire Society.

3424 **III. (£5.)**—Victor D. Dennis, New Hall Farm, Ruabon, for **New Hall King 2nd B. 1316**, born Oct. 14; *s.* Highfield Royal Pygmalion 26309, *d.* British Queen 20415 *by* Murrel King 19579.

3430 **R. N.**—Friend Sykes, Richings Park, Colubrook, for **Richings Beauty Royalist 2nd.**

Class 394.—*Berkshire Boars, born in* 1925.

3440 **I. (£10.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Basildon Pioneer**, born Jan. 2; *s.* Jamaica Frederick 23658, *d.* Manor Sweet Bess S. 3597 *by* Iwerne First Grade 23231.

3438 **II. (£5.)**—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Monarch B. 1459**, born Feb. 2; *s.* Suddon Monty B. 337, *d.* Hammonds Belle 4th S. 4662 *by* Hurry Onward 22033.

3439 **III. (£3.)**—T. L. Martin, for **Ashe Premier B. 1460**, born Jan. 10; *s.* Highfield British Pygmalion B. 845, *d.* Ashe Virtue S. 4097 *by* Money Bag 23974.

3433 **IV. (£2.)**—Major Clive Behrens, Swinton Grange, Malton, for boar, born Feb. 5; *s.* Highfield Royal President B. 338, *d.* Swinton Margaret S. 2216 *by* Basildon Rubin 24670.

3445 **V. (£1.)**—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield Roy Pygmalion 2nd B. 1420**, born Jan. 2; *s.* Highfield Royal Pygmalion 3rd B. 852, *d.* Highfield Marina 2nd S. 1402 *by* Pamber President 22702.

3436 **R. N.**—J. T. Eason, Woodhouse Farm, Smannel, Andover, for **Woodhouse Bonny Boy.**

Class 395.—*Berkshire Breeding Sows, born in or before* 1923.

3449 **I. (£10, & R. N. for Champion.[1])**—R. W. Carson, Lea Hall, Hatfield Heath, Harlow, for **Suddon Progress** (T.N. 64), born July 23, 1923, farrowed March 12, bred by J. Fricker, Marsh Farm, Stalbridge, Dorset; *s.* Heale War Lunn 24172, *d.* Manor Marquita 24326 *by* Braishfield Buck 19909.

3450 **II. (£5.)**—J. T. Eason, Woodhouse Farm, Smannel, Andover, for **Mount Select S. 2098**, born Jan. 11, 1923, farrowed Feb. 14, bred by T. A. Edney Hayter, Whitchurch, Hants; *s.* Heale Nutmeg 2nd 26448, *d.* Herriard Select 2nd 23098 *by* Basildon Rogue 20720.

3458 **III. (£3.)**—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield Marina 2nd S. 1402**, born May 23, 1922, farrowed Jan. 2; *s.* Pamber President 22702, *d.* Manor Marina 24324 *by* Braishfield Buck 19909.

3456 **IV. (£2.)**—T. L. Martin, Ashe Warren, Overton, Hants, for **Suddon Flapper S. 1891**, born July 10, 1922, farrowed Feb. 5, bred by J. Fricker, Marsh Farm, Stalbridge, Dorset; *s.* Heale War Lunn 24172, *d.* Manor Marcella 20008 *by* Top Emerald 19850.

3453 **V. (£1.)**—The Earl of Harewood, Harewood House, Leeds, for **Harewood Princess S. 4533**, born Feb. 17, 1923, farrowed Jan. 28; *s.* Murrell Hottentot Nigger B. 183, *d.* Harewood Rosalind S. 115 *by* Herriard Clondyke 23100.

3446 **R. N.**—Colonel H. Lyon Anderton, Ingmanthorpe Hall, Wetherby, for **Highfield British Queen 6th.**

Class 396.—*Berkshire Sows, born in* 1924, *before July* 1.

3467 **I. (£10.)**—J. T. Eason, Woodhouse Farm, Smannel, Andover, for **Woodhouse Miss Prim S. 4740**, born May 28; *s.* Herriard Columbus 2nd 24873, *d.* Mount Selection S. 2099 *by* Heale Nutmeg 2nd 26448.

3483 **II. (£5.)**—W. F. Sherriff, Ascots, Hatfield, for **Ascots Princess 2nd S. 4109**, born Jan. 8; *s.* Eaton Benefactor 26198, *d.* Ascots Princess S. 4104 *by* Minley Exile 24161.

3484 **III. (£3.)**—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield Marina British Queen S. 4898**, born March 29; *s.* Highfield Royal President 2nd B. 339, *d.* Highfield Marina 2nd S. 1402 *by* Pamber President 22702.

3463 **IV. (£2.)**—Major Clive Behrens, Swinton Grange, Malton, for **Swinton Lucky Molly**, born Jan. 18; *s.* Murrell Live Scott B. 37, *d.* Swinton Sweet Molly 4th S. 1988 *by* Basildon Rubin 24670.

3477 **V. (£1.)**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **Basildon Maid 8th S. 4893**, born Jan. 9; *s.* Murrell Mike 21239, *d.* Sotwell Maid 2nd 23829 *by* Suddon Lord 21740.

3474 **R. N.**—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Mimic.**

H. C.—3473. **C.**—3468, 3478, 3480, 3482, 3485.

Class 397.—*Berkshire Sows, born in* 1924, *on or after July* 1.

3496 **I. (£10.)**—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield Marina British Queen 4th S. 5293**, born Sept. 12; *s.* Highfield British Pygmalion 3rd B. 847, *d.* Manor Marina 24324 *by* Braishfield Buck 19909.

3497 **II. (£5.)**—Frank Townend, for **Highfield Marina British Queen 5th S. 5294**, born Sept. 12; *s.* Highfield British Pygmalion 3rd B. 847, *d.* Manor Marina 24324 *by* Braishfield Buck 19909.

3495 **III. (£3.)**—Friend Sykes, Richings Park, Colnbrook, for **Richings Princess Jennet 1st S. 5222**, born July 24; *s.* Richings Prince Diamond B. 254, *d.* Beauhearne Jane S. 896 *by* Herriard Premier 3rd 23110.

3488 **IV. (£2.)**—Major Clive Behrens, Swinton Grange, Malton, for sow, born July 1; *s.* Eaton Emperor B. 558, *d.* Swinton Martha 9th S. 4247 *by* Basildon Rubin 24670.

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[1] The "Eaton" Silver Challenge Cup, value Fifty Guineas, given through the British Berkshire Society, for the best Boar or Sow in Classes 391 to 397. A Gold Medal was given by the British Berkshire Society to the Breeder of this Champion Pig.

3491 V. (£1.)—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Vain Girl S. 5285**, born Aug. 29; *s.* Kingstone Forester B. 31, *d.* Abinger Vanity 23713 *by* Kingstone Peacemaker 21339.

3492 R. N.—W. F. Sherriff, Ascots, Hatfield, for **Iwerne Star 4th.**

H. C.—3487. C.—3498.

Class 398.—*Two Berkshire Sows, born in* 1925.

3506 I. (£10.)—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Maruja 1st S. 5367 and Ashe Maruja 2nd S. 5368**, born Jan. 7; *s.* Highfield British Pygmalion B. 845, *d.* Hammonds Maruja 3rd S. 4663 *by* Biddesden Beau B. 111.

3511 II. (£5.)—Frank Townend, Highfield, Moor Allerton, Leeds, for **Highfield British Queen 8th S. 5291 and Highfield British Queen 9th S. 5292**, born Jan. 2; *s.* Highfield Royal Pygmalion B. 852, *d.* Highfield Marina 2nd S. 1402 *by* Pamber President 22702.

3507 III. (£3.)—T. L. Martin, for **Ashe Princess Dorothy 1st S. 5365 and Ashe Princess Dorothy 2nd S. 5366**, born Jan. 22; *s.* Highfield British Pygmalion B. 845, *d.* Suddon Princess Dorothy S. 4094 *by* Heale War Lunn 24172.

3500 IV. (£2.)—Major Clive Behrens, Swinton Grange, Malton, for **sows**, born Feb. 5; *s.* Highfield Royal President B. 338, *d.* Swinton Margaret S. 2216 *by* Basildon Rubin 24670.

3509 V. (£1.)—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading, for **sows**, born Jan. 2; *s.* Jamaica Frederick 23658, *d.* Manor Sweet Bess S. 3597 *by* Iwerne First Grade 23231.

3505 R. N.—The Earl of Harewood, Harewood House, Leeds.

C.—3504.

Cup.[1]—Frank Townend.

R. N. for Cup.[1]—T. L. Martin.

Large Blacks.

Class 399.—*Large Black Boars, born in or before* 1923.

3513 I. (£10, & Champion.[2])—William Bracey, Manor House, Martham, Gt. Yarmouth, for **Martham Premier 25459**, born July 17, 1922; *s.* Martham What's Wanted 15283, *d.* Awton Victorious 1st 46816 *by* Cornwood King John 8271.

3530 II. (£5, & R. N. for Champion.[2])—Walter Woolland, Baydon Manor, Ramsbury, Wilts, for **Valley General 2nd 25401**, born Feb. 28, 1922, bred by J. C. Olver, Ladock, Cornwall; *s.* Valley Result 18535, *d.* Trevisquite Victory 14th 30340 *by* Restronguet Pioneer 6997.

3512 III. (£3.)—Harry E. Bastard, Tinten Manor, St. Tudy, Cornwall, for **Tinten Dandy 2nd 30745**, born May 4, 1923; *s.* Rialton Hero 13241, *d.* Tinten Princess 4th 73608 *by* Fentongollan Lad 10567.

3528 IV. (£2.)—Walter J. Warren, Deacons Farm, Staplegrove, Taunton, for **Kibbear Royal Willie 25777**, born Sept. 9, 1922; *s.* Vahan Jack 5th 13845, *d.* Kibbear Lady Hilda 1st 58232 *by* Bassingbourn Squire 9053.

3522 V. (£1.)—Miss Boughton Knight, Tinker's Hill, Ludlow, for **Bringewood Boy 27229**, born June 25, 1922; *s.* Sheriffhales Boy 1st 17731, *d.* Bringewood Treasure 77224 *by* Primley Luther 9901.

3521 R. N.—W. L. Hosking & Sons, Fentongollan, Merther, Probus, Cornwall, for **Fentongollan Result 6th.**

H. C.—3515, 3523. C.—3516.

Class 400.—*Large Black Boars, born in* 1924, *before July* 1.

3532 I. (£10.)—William Bracey, Manor House, Martham, Great Yarmouth, for **Martham Rising Tide A. 120**, born Jan. 16; *s.* Martham Nomination 22397, *d.* Martham Mable 96996 *by* Martham What's Wanted 15283.

3537 II. (£5.)—Terah F. Hooley, Dry Drayton, Cambridge, for **Drayton Doctor A. 1233**, born Feb. 18; *s.* Fentongollan Roger 10523, *d.* Wanborough Fairy 1st 76156 *by* Wanborough Waif 11419.

3536 III. (£3.)—F. E. Hicks, Treator House, Padstow, Cornwall, for **Treator Ambassador A. 1081**, born April 5; *s.* Tregirls Vicar 17355, *d.* Valley Kitty 3rd 28966 *by* Treveglos Marksman 7761.

3534 IV. (£2.)—F. M. Furze, Goldstones Farm, Ashdon, Saffron Walden, for **Newland Diameter A. 99**, born Jan. 12, bred by Dr. A. R. Kay, The Manor House, Blakeney, Norfolk; *s.* Bardolph A1 25119, *d.* Newland Diana 109334 *by* Tiptree Rex 19017.

3540 R. N.—Walter J. Warren, Deacons Farm, Staplegrove, Taunton, for **Kibbear Royal Prior 4th.**

H. C.—3531.

Class 401.—*Large Black Boars, born in* 1924, *on or after July* 1.[3]

3548 I. (£10.)—Terah F. Hooley, Dry Drayton, Cambridge, for **Drayton David A. 1235**, born July 10; *s.* Drayton Sunstar 30449, *d.* Witham Lady 3rd 47166 *by* Bixley Chance It 11503.

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[1] The "Berkshire" Silver Challenge Cup, value £20, given through the British Berkshire Society, for the most points awarded in a combination of entries in Classes 391 to 398, on the basis of: Four points for a First Prize, three points for a Second Prize, two points for a Third Prize, one point for a Reserve Number, two points for a Championship, and one point for a Reserve for a Championship.

[2] Champion Prize of £10, given by the Large Black Pig Society, for the best Boar in Classes 399 to 402. A Silver Medal was given to the Breeder of the Champion Boar.

[3] Prizes, except Fourth and Fifth, given by the Large Black Pig Society.

3549 **II. (£5.)**—W. L. HOSKING & SONS, Fentongollan, Merther, Probus, Cornwall, for **Fentongollan Dux 1st** A. 1057, born Aug. 15; *s.* Fentongollan Vassal 28689, *d.* Fentongollan Magua Nigra 127098 *by* Fentongollan Victor 2nd 21425.

3550 **III. (£3.)**—T. F. JAMES, Chantersleur Farm, Norwood Hill, Horley, Surrey, for **Treluckey Black Boy 4th** A. 1145, born July 1; *s.* Hewas Duke 8th 28961, *d.* Treluckey Black Lady 4th 95560 *by* Valley Ruler 2nd 15705.

3546 **IV. (£2.)**—VISCOUNT FEILDING, Newnham Paddox, Rugby, for **Streetaston Paddy 2nd** A. 1147, born July 28; *s.* Pooley Paddy 18161, *d.* Streetaston Sunflower 9th 91330 *by* Cambria Deputy 23141.

3545 **V. (£1.)**—A. P. COCKBURN, Stanborough, Halwell, Devon, for **Stanborough Sunstar** A. 1019, born Aug. 10; *s.* Drayton Scorcher 30447, *d.* Stanborough Jean 1st 116204 *by* Awton Sampson 21891.

3544 **R. N.**—A. P. COCKBURN, for **Stanborough Scorcher.**
H. C.—3552. **C.**—3553.

Class 402.—*Large Black Boars, born in* 1925.

3570 **I. (£10.)**—TERAH F. HOOLEY, Dry Drayton, Cambridge, for **Drayton Donegal 1st** B. 107, born Feb. 1; *s.* Drayton Sunstar 30449, *d.* Drayton Minerva 1st 79324 *by* Cornwood Longsides 17441.

3577 **II. (£5.)**—JOHN C. OLVER, Woodland Valley, Ladock, Cornwall, for **Valley Cadet** B. 143, born Jan. 11; *s.* Valley Outfit 29771, *d.* Valley Clematis 3rd 106238 *by* Valley Sportsman 23735.

3572 **III. (£3.)**—T. F. JAMES, Chantersleur Farm, Norwood Hill, Horley, Surrey, for **Treluckey Up to Date 1st** B. 67, born Jan. 2; *s.* Treluckey Sportsman 2nd A. 125, *d.* Treluckey Black Lady 4th 95560 *by* Valley Ruler 2nd 15705.

3554 **IV. (£2.)**—HARRY E. BASTARD, Tinten Manor, St. Tudy, Cornwall, for **Cornwood Huntsman** B. 19, born Jan. 5, bred by J. H. Glover, Cornwood; *s.* Cornwood Pilot 16037, *d.* Cornwood Lass 68th 90968 *by* Rialton Hero 13241.

3569 **V. (£1.)**—G. A. GOODCHILD, Great Yeldham Hall, Great Yeldham, Essex, for **Tartar Principal** B. 119, born Jan. 13; *s.* Drayton Mikado 1st 11859, *d.* Tartar Queen G. 88166 *by* Kedington Embargo 17605.

3562 **R. N.**—E. W. EDWARDS, Pednor House, Chesham, for **Pednor Democrat.**
H. C.—3564, 3573. **C.**—3560, 3567, 3580.

Class 403.—*Large Black Breeding Sows, born in or before* 1923.

3593 **I. (£10, & Champion.[1])**—JOHN H. GLOVER, Delamore Farm, Cornwood, Devon, for **Cornwood Lass 73rd** 96820, born Sept. 19, 1922, farrowed April 12; *s.* Westpetherwin Chief 1st 14433, *d.* Cornwood Lass 58th 38332 *by* Fentongollan Naik 9455.

3598 **II. (£5.)**—WALTER J. WARREN, Deacons Farm, Staplegrove, Taunton, for **Haselbury Dinah** 114150, born Aug. 13, farrowed Jan. 16, bred by Major W. Harrison, Haselbury, Crewkerne; *s.* Kibbear Royal Prior 3rd 21363, *d.* Tinten Belle 48126 *by* Trevisquite Padstonian 7973.

3588 **III. (£3.)**—WILLIAM BRACEY, Manor House, Martham, Great Yarmouth, for **Martham Dinah** A. 79776, born Jan. 8, 1921, farrowed Jan. 20; *s.* Valley Good Boy 13733, *d.* Coltishall Dinah 21002 *by* Primley Huron 6173.

3587 **IV. (£2.)**—H. E. BENNETT, Hawkenbury, Staplehurst, for **Ambo Alpha** 70658, born Jan. 16, 1921, farrowed March 3; *s.* Trevisquite Lord of the Manor 13045, *d.* Witley Salome 33940 *by* Drayton Witley Hero 7157.

3594 **V. (£1.)**—G. A. GOODCHILD, Great Yeldham Hall, Great Yeldham, Essex, for **Tartar Victoria 1st** 80544, born Jan. 2, 1922, farrowed Jan. 7; *s.* Kedington Embargo 17605, *d.* Tartar Queen 8th 17524 *by* Kibbear John 1st 5391.

3591 **R. N.**—E. W. EDWARDS, Pednor House, Chesham, for **Pednor Prudence. 1st.**
H. C.—3592. **C.**—3589.

Class 404.—*Large Black Sows, born in* 1924, *before July* 1.

3607 **I. (£10.)**—H. A. BROWN, Croft House, Grendon, Atherstone, for **Grendon Quicksilver** A. 3076, born Feb. 18; *s.* Trevisquite Lord of the Manor 13045, *d.* Grendon Quicklime 1st 84526 *by* Tinten Chief 12969.

3603 **II. (£5.)**—H. E. BENNETT, Hawkenbury, Staplehurst, for **Ambo Augusta 6th** A. 1926, born Jan. 7; *s.* Kingston Roland 26399, *d.* Ambo Augusta 70648 *by* Trevisquite Lord of the Manor 13045.

3612 **III. (£3.)**—JOHN C. OLVER, Woodland Valley, Ladock, Cornwall, for **Valley Deepsides 3rd** A. 418, born Jan. 13; *s.* Valley Sportsman 23735, *d.* Valley Deepside 17548 *by* Valley Big Ben 2nd 16205.

3616 **IV. (£2.)**—WALTER WOOLLAND, Baydon Manor, Ramsbury, Wilts, for **Baydon Nightingale 7th** A. 2772, born Jan. 5; *s.* Runtley Captain 24433, *d.* Clipston Nightingale 4th 93690 *by* Drayton Dolcoath 2nd 13287.

3606 **V. (£1.)**—WILLIAM BRACEY, Manor House, Martham, Great Yarmouth, for **Martham Smiling Lady** A. 2948, born Feb. 20; *s.* Martham Hero 20497, *d.* Martham Black Bess 79870 *by* Tinten King Henry 13139.

3613 **R. N.**—ALFRED PLAYLE, Bassingbourn, Cambs, for **Bassingbourn Bertha 3rd.**
H. C.—3608, 3609. **C.**—3611.

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[1] Silver Challenge Cup, value Twenty Guineas, given by the Large Black Pig Society for the best Sow in Classes 403 to 405. A Silver Medal was given to the Breeder of the Champion Sow.

Class 405.—*Large Black Sows, born in* 1924, *on or after July* 1.

3634 **I. (£10, & R. N. for Champion.[1])**—John C. Olver, Woodland Valley, Ladock, Cornwall, for **Valley Clematis 12th** A. 4712, born July 15; *s.* Valley Sportsman 23735, *d.* Moorland Clematis 26498 *by* Vahan Perfection 6573.

3628 **II. (£5.)**—Terah F. Hooley, Dry Drayton, Cambridge, for **Drayton Duncathra 3rd** A. 4628, born July 10; *s.* Drayton Sunstar 30449, *d.* Witham Lady 3rd 47166 *by* Bixley Chance It 11503.

3617 **III. (£3.)**—William Bracey, Manor House, Martham, Great Yarmouth, for **Martham Queenie** A. 4592, born July 16; *s.* Martham Nomination 22397, *d.* Menna Queen 54th 61670 *by* Rialton Hero 13241.

3619 **IV. (£2.)**—Captain F. N. Cross, D.S.O., Bannut Tree House, Castlemorton, Malvern, for **Bannut Tree Ladylike 2nd** A. 3170, born July 15; *s.* Bannut Tree Pharaoh 26119, *d.* Tiptree Ladylike 92320 *by* Tiptree Rex 19017.

3631 **V. (£1.)**—T. F. James, Chantersluer Farm, Norwood Hill, Horley, for **Treluckey Future Queen 5th** A. 4288, born July 14; *s.* Hewas Duke 8th 28961; *d.* Treluckey Future Queen 3rd 104752 *by* Trevisquite Principal 17485.

3629 **R. N.**—Terah F. Hooley, for **Drayton Duncathra 4th.**

H. C.—3618, 3622, 3627. **C.**—3624, 3626, 3633.

Class 406.—*Two Large Black Sows, born in* 1925.

3647 **I. (£10.)**—John H. Glover, Cornwood, Devon, for **Cornwood Lass 81st** B. 24 and **Cornwood Lass 80th** B. 22, born Jan. 5; *s.* Cornwood Pilot 16037, *d.* Cornwood Lass 68th 90968 *by* Rialton Hero 13241.

3637 **II. (£5.)**—Harry E. Bastard, Tinten Manor, St. Tudy, Cornwall, for **Tinten Black Bess 49th** B. 10, and **Tinten Black Bess 50th** B. 12, born Jan. 4; *s.* Cornwood J.P. 2nd 28949, *d.* Tinten Black Bess 34th 38340 *by* Cornwood King John 8271.

3643 **III. (£3.)**—E. W. Edwards, Pednor House, Chesham, for **Pednor Best of All 1st** B. 56, and **Pednor Best of All 2nd** B. 58, born Jan. 1; *s.* Pednor Anchorite 10th 29313, *d.* Northdean Best of All 14th 106878 *by* Wilbraham Salary 10623.

3650 **IV. (£2.)**—Miss Kay-Mouat, Firs Farm, Malvern Wells, for **McHeather Biddy 66th** B. 304 and **McHeather Biddy 67th** B. 306, born Jan. 2; *s.* McHeather Shah 6th 25355, *d.* McHeather Biddy 40th 104332 *by* Beacon Sambo 21691.

3651 **V. (£1.)**—Captain Percy Musker, Roudham Hall, Attleborough, for **Roudham Levelsides 2nd** and **Roudham Levelsides 3rd**, born Jan. 10; *s.* Rialton Hero 13241, *d.* Trevisquite Levelsides 56th 81736 *by* Hendra Trevisquite 14333.

3652 **R. N.**—Alfred Playle, Bassingbourn, Cambs, for **Bassingbourn Grace 1st** and **Bassingbourn Grace 2nd.**

H. C.—3649. **C.**—3645.

Gloucestershire Old Spots.

Class 407.—*Gloucestershire Old Spots Boars, born in or before* 1923.

3656 **I. (£10, & R. N. for Champion.[2])**—Frederick W. Fanshawe, Old Sulehay Lodge, Yarwell, Peterborough, for **Sulehay Jumbo** 5181, born May 2, 1923; *s.* Hill House Jumbo 2nd 2962, *d.* Dumbleton Pansy 9061 *by* Hodgecombe Lad 1022.

3654 **II. (£5.)**—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley General 2nd** 5277, born March 15, 1923; *s.* Ashton Dapper 4627, *d.* Dinedor Barmaid 8390 *by* Clevehill Actor 664.

3657 **III. (£3.)**—Henry Matthews, Down Farm, Winterbourne, Bristol, for **Winterbourne Premier** 5531, born July, 1923; *s.* Frampton Kruger 4808, *d.* Winterbourne Bessie 5735 *by* Yate Prince 1516.

3658 **R. N.**—George Carter Oliver, The Elms, Horley, for **Merridale Joe.**

Class 408.—*Gloucestershire Old Spots Boars, born in* 1924, *before July* 1.

3663 **I. (£10, Champion,[3] & R. N. for Champion.[3])**—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Llantwit Evan** 5418, born Feb. 9; *s.* Stoke Hill Magnet 4516, *d.* Llantwit Edith 13963 *by* Downside Duke 4146.

3661 **II. (£5.)**—Bennett & Howard, Quarry Farm, Thornbury, Glos, for **Huntingford Dauntless** 5475, born March 12, bred by F. G. Bell, Huntingford, Charfield, Glos; *s.* Holmwood Dreadnought 4821, *d.* Huntingford Josephine 16324 *by* Ithells Major 2nd 2084.

3660 **III. (£3.)**—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley General 3rd**, born Jan. 2; *s.* Ashton Dapper 4627, *d.* Maiden Bradley Barmaid 14640 *by* Maiden Bradley Champion 3858.

3662 **R. N.**—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Premier 6th.**

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[1] Silver Challenge Cup, value Twenty Guineas, given by the Large Black Pig Society, for the best Sow in Classes 403 to 405. A Silver Medal was given to the Breeder of the Champion Sow.

[2] Silver Challenge Cup, value Twenty Guineas, given through the Gloucestershire Old Spots Pig Society, for the best Boar in Classes 407 to 410.

[3] Silver Challenge Cup, value Forty Guineas, given through the Gloucestershire Old Spots Pig Society, for the best Boar or Sow in Classes 407 to 413.

Class 409.—*Gloucestershire Old Spots Boars, born in* 1924, *on or after July* 1.[1]

3666 **I.** (£10.)—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Duke 4th 5517**, born July 5; *s.* Dorset Diver 4401, *d.* Nashes Duchess 13th 16230 *by* Huntingford Polemarsh 4210.

3667 **II.** (£5.)—Sherriff & Sons, for **Nashes Duke 7th** 5532, born Oct. 27; *s.* Ayot Popgun 5405, *d.* Nashes Duchess 10th 16227 *by* Gilslake Soldier 3127.

3665 **III.** (£3.)—Henry Matthews, Down Farm, Winterbourne, Bristol, for **Winterbourne Famous** 5530, born Sept. 24; *s.* Clapcote Masterpiece 5228, *d.* Fairfield Elgion 12th 17531 *by* Fairfield Famous 3rd 4162.

Class 410.—*Gloucestershire Old Spots Boars, born in* 1925.

3675 **I.** (£10.)—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Llantwit Larry** 5520, born Jan. 5; *s.* Llantwit Hero 2nd 5347, *d.* Downside Lily 16277 *by* Downside Loyal 4339.

3670 **II.** (£5.)—Bennett & Howard, Quarry Farm, Thornbury Glos, for **Thornbury Baronet** 5514, born Jan. 28; *s.* Eastacote Roger 5393, *d.* Thornbury Bar None 15783 *by* Ashton Bloomer 1741.

3668 **III.** (£3.)—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley Tip Top 2nd** 5515, born Jan. 2; *s.* Ashton Dapper 4627, *d.* Maiden Bradley Barmaid 2nd 14641 *by* Maiden Bradley Champion 1st 3858.

3671 **R. N.**—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Duke 6th.**

Class 411.—*Gloucestershire Old Spots Breeding Sows, born in or before* 1923.

3677 **I.** (£10.)—Bennett & Howard, Quarry Farm, Thornbury, Glos, for **Thornbury Bar None** 15783, born July 24, 1922, farrowed Jan. 28; *s.* Ashton Bloomer 1741, *d.* Thornbury Barmaid 7851 *by* Gilslake Admiral 907.

3681 **II.** (£5.)—Robert James Muir Wilson, Windle Grange, St. Helens, for **Crank Pride's Best** 17618, born Jan. 20, 1923, farrowed Jan. 4; *s.* Windrush Major 4309, *d.* Crank Pride 15035 *by* Failand Victory 900.

3680 **III.** (£3.)—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Duchess 13th** 16230, born Aug. 8, 1922, farrowed Jan. 18; *s.* Huntingford Polemarsh 4210, *d.* Nashes Duchess 1st 9036 *by* Harlequin of Hollywood Tower 911.

3679 **R. N.**—George Carter Oliver, The Elms, Horley, for **Hartland Diana.**

Class 412.—*Gloucestershire Old Spots Sows, born in* 1924, *before July* 1.

3683 **I.** (£10, Champion,[3] & Champion.[2])—Bennett & Howard, Quarry Farm, Thornbury, Glos, for **Thornbury Bar Two** X. 228, born Jan. 2; *s.* Ayot Page 5069, *d.* Thornbury Bar None 15783 *by* Ashton Bloomer 1741.

3686 **II.** (£5.)—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Llantwit Rebecca** X. 286, born Jan. 31; *s.* Holmwood Dandy 5245, *d.* Llantwit Ruth 17499 *by* Llantwit Boy 4361.

3682 **III.** (£3.)—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley Maid 13th** X. 492, born April 8; *s.* Ashton Dapper 4627, *d.* Maiden Bradley Barmaid 3rd 14642 *by* Maiden Bradley Champion 1st 3858.

3684 **R. N.**—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Duchess 18th** 237, born Jan. 18; *s.* Dorset Diver 4401, *d.* Nashes Duchess 9th 16226 *by* Gilslake Soldier 3127.

Class 413.—*Gloucestershire Old Spots Sows, born in* 1924, *on or after July* 1.

3687 **I.** (£10, & R. N. for Champion.[2])—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley Maid 9th**, born Aug. 11; *s.* Clapcote Madoc 5413, *d.* Maiden Bradley Maid 3rd 17492 *by* Ashton Dapper 4627.

3689 **II.** (£5.)—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Duchess 25th** X. 495, born July 5; *s.* Dorset Diver 4401, *d.* Nashes Duchess 13th 16230 *by* Huntingford Polemarsh 4210.

3690 **III.** (£3.)—Sherriff & Sons, for **Nashes Duchess 30th** X. 523, born Oct. 27; *s.* Ayot Popgun 5405, *d.* Nashes Duchess 10th 16227 *by* Gilslake Soldier 3127.

3692 **R. N.**—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Llantwit Enid.**

Class 414.—*Two Gloucestershire Old Spots Sows, born in* 1925.

3695 **I.** (£10.)—Bennett & Howard, Quarry Farm, Thornbury, Glos, for **Thornbury Baroness** X. 489 and **Thornbury Bargain** X. 490, born Jan. 28; *s.* Eastacote Roger 5393, *d.* Thornbury Bar None 15783 *by* Ashton Bloomer 1741.

3693 **II.** (£5.)—James D. Beak, Maiden Bradley, Bath, for **Maiden Bradley Maid 14th** X. 493 and **Maiden Bradley Maid 15th** X. 494, born Jan. 2; *s.* Ashton Dapper 4627, *d.* Maiden Bradley Barmaid 2nd 14641 *by* Maiden Bradley Champion 1st 3358.

3698 **III.** (£3.)—F. Harold Turnbull, Lower House Farm, Llantwit Major, Cardiff, for **Llantwit Juno** X. 507 and **Llantwit Jane** X. 508, born Jan. 1; *s.* Llantwit Ben 5412, *d.* Llantwit Jill 16900 *by* Netherton Beltane 3998.

3696 **R. N.**—Sherriff & Sons, Lemsford, Hatfield, for **Nashes Blossom 22nd** X. 526 and **Nashes Blossom 23rd** X. 527, born March 16; *s.* Dorset Diver 4401, *d.* Nashes Blossom 15th 17229 *by* Ayot Premier 4871.

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[1] Prizes given by the Gloucestershire Old Spots Pig Society.

[2] Silver Challenge Cup, value Forty Guineas, given through the Gloucestershire Old Spots Pig Society; for the best Boar or Sow in Classes 407 to 413.

[3] Silver Challenge Cup, value Twenty Guineas, given through the Gloucestershire Old Spots Pig Society, for the best Sow in Classes 411 to 413.

Lincolnshire Curly-Coated.

Class 415.—*Lincolnshire Curly-Coated Boars, born in or before* 1923.

3701 **I. (£10, & R. N. for Champion.[1])**—F. J. Caudwell, Manor House, Sibsey, Boston, for **Bold Prince 2nd 4643** (T.N. 133), born Jan. 20, 1921, bred by W. Abbott, Swaton, Billingborough; *s.* Ponton Prince 4103, *d.* Bold Evolution 12366 *by* Carrington Grange Evolution 2nd 1389.

3703 **II. (£5.)**—William Todd, Little Ponton Grange, Grantham, for **Midville R. 2nd 4493** (T.N. 197), born May 1921, bred by F. J. Caudwell, Sibsey, Boston; *s.* Carrington Grange Majestic 1st 4281, *d.* Midville Beauty 28th 12062 *by* Burton Last 4185.

3702 **III. (£3.)**—George Freir, Deeping St. Nicholas, Spalding, for **Toynton Hero 4th 4983** (T.N. 45), born May 10, 1923, bred by A. E. Alliss, Toynton, Spilsby; *s.* Holmes Hero 6th 4689, *d.* Toynton Queen 3rd 12872 *by* Ponton Forerunner 4535.

Class 416.—*Lincolnshire Curly-Coated Boars, born in* 1924.[2]

3707 **I. (£10, & Champion.[1])**—George Freir, Deeping St. Nicholas, Spalding, for **Pinchbeck Messenger Boy** (T.N. 44), born Jan. 24, bred by J. H. Holmes, Pinchbeck; *s.* Deeping Ash 4741, *d.* Bold Princess 4th 12504 *by* Ponton Prince 4105.

3705 **II. (£5.)**—Frederick E. Bowser, Wigtoft, Boston, for **Wigtoft Baldwin 8th** (T.N. 979), born Jan. 5; *s.* Holmes Hero 5th 4687, *d.* Wigtoft Helen 3rd 12154 *by* Carrington Grange Mascot 2nd 4287.

3706 **III. (£3.)**—F. J. Caudwell, Manor House, Sibsey, Boston, for **Midville Royalist 5107** (T.N. 107), born Jan. 7; *s.* Wigtoft Baldwin 3rd 4865, *d.* Midville Iris 7th 12958 *by* Bold Prince 2nd 4643.

3704 **IV. (£2.)**—William Abbott, Swaton, Billingborough, for **Bold Prince 3rd 5151** (T.N. 1, 4), born Jan. 10; *s.* Frieston Bold 4713, *d.* Bold Princess 1st 12504 *by* Ponton Prince 4105.

Class 417.—*Lincolnshire Curly-Coated Boars, born in* 1925.

3710 **I. (£10.)**—Frederick E. Bowser, Wigtoft, Boston, for boar (T.N. 217), born Jan. 7; *s.* Holmes Hero 5th 4687, *d.* Wigtoft Majority 2nd 12760 *by* Fishtoft Leader 3rd 4575.

3709 **II. (£5.)**—Frederick E. Bowser, for boar (T.N. 216), born Jan. 7; *s.* Holmes Hero 5th 4687, *d.* Wigtoft Majority 2nd 12760 *by* Fishtoft Leader 3rd 4575.

3711 **III. (£3.)**—Harold H. Bowser, The Holmes, Kirton Holme, Boston, for **Holmes Hero 33rd** (T.N. 50), born Jan. 5; *s.* Wigtoft Majestic 6th 4635, *d.* Holmes Pride 30th 12778 *by* Fishtoft Leader 3rd 4575.

3708 **R. N.**—William Abbott, Swaton, Billingborough.

Class 418.—*Lincolnshire Curly-Coated Breeding Sows, born in or before* 1923.

3715 **I. (£10, & Champion.[3])**—Harold H. Bowser, The Holmes, Kirton Holme, Boston, for **Holmes Pride 26th 12770** (T.N. 26), born Jan. 4, 1923, farrowed Jan. 18; *s.* Fishtoft Leader 3rd 4575, *d.* Holmes Pride 5th 12352 *by* Caythorpe Bob 4487.

3713 **II. (£5.)**—William Abbott, Swaton, Billingborough, for **Bold Cambridge 2nd 12510** (T.N. 6, 2), born Jan., 1922, farrowed Jan. 4; *s.* Bold Dean 2nd 4639, *d.* Bold Evolution 1st 12366 *by* Lafford 19th 3895.

3714 **III. (£3.)**—Frederick E. Bowser, Wigtoft, Boston, for **Wigtoft Mabel 1st 12764** (T.N. 925), born Feb. 1, 1923, farrowed Jan. 6; *s.* Holmes Hero 5th 4687, *d.* Wigtoft Heroine 3rd 12158 *by* Carrington Grange Mascot 2nd 4287.

3718 **R. N.**—George Freir, Deeping St. Nicholas, Spalding, for **Deeping Wensor 1st.**

Class 419.—*Lincolnshire Curly-Coated Sows, born in* 1924.

3719 **I. (£10, & R. N. for Champion.[3])**—Frederick E. Bowser, Wigtoft, Boston, for **Wigtoft Minnie 5th** (T.N. 971), born Jan. 5; *s.* Midville Bob 8th 4803, *d.* Minnie 1st 12852 *by* Holmes Hero 5th 4687.

3721 **II. (£5.)**—F. J. Caudwell, Manor House, Sibsey, Boston, for **Midville Jenny** (T.N. 114), born Jan. 6; *s.* Bold Prince 2nd 4643, *d.* Midville Madam 4th 12408 *by* Carrington Grange Majestic 4281.

3720 **III. (£3.)**—Harold H. Bowser, The Holmes, Kirton Holme, Boston, for **Holmes Pride 38th 12946** (T.N. 38), born Jan. 3; *s.* Wigtoft Majestic 6th 4635, *d.* Holmes Pride 26th 12770 *by* Fishtoft Leader 3rd 4575.

3722 **R. N.**—George Freir, Deeping St. Nicholas, Spalding, for **Deeping Kirton 4th.**

Class 420.—*Two Lincolnshire Curly-Coated Sows, born in* 1925.

3728 **I. (£10.)**—George Freir, Deeping St. Nicholas, Spalding, for **Deeping Kirton 9th** (T.N. 41) and **Deeping Kirton 10th** (T.N. 42), born Jan. 10; *s.* Toynton Hero 4th 4983, *d.* Deeping Kirton 2nd *by* Gainsborough Deeping 4317.

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[1] Champion Prize of £5 5*s.*, given by the Lincolnshire Curly-Coated Pig Breeders' Association, for the best Boar in Classes 415 to 417.

[2] Prizes, except Fourth, given by the Lincolnshire Curly-Coated Pig Breeders' Association.

[3] Champion Prize of £5 5*s.*, given by the Lincolnshire Curly-Coated Pig Breeders' Association, for the best Sow in Classes 418 and 419.

3726 **II.** (£5.)—Harold H. Bowser, The Holmes, Kirton Holme, Boston, for **Holmes Pride 42nd** (T.N. 42), and **Holmes Pride 43rd** (T.N. 43), born Jan. 5; *s.* Wigtoft Majestic 6th 4635, *d.* Holmes Pride 30th 12778 *by* Fishtoft Leader 3rd 4575.

3727 **III.** (£3.)—Harold H. Bowser, for **Holmes Pride 44th** (T.N. 44) and **Holmes Pride 45th** (T.N. 45), born Jan. 5; *s.* Wigtoft Majestic 6th 4635, *d.* Holmes Pride 30th 12778 *by* Fishtoft Leader 3rd 4575.

3725 **R. N.**—Frederick E. Bowser, Wigtoft, Boston.

Cumberland.

Class 421.—*Cumberland Boars, born in or before* 1923.

3730 **I.** (£10.)—John S. Jordan, Bowston, Kendal, for **Bleatarn Excelsior** 4473 (T.N., R.O.V., E. 1), born Jan. 29, 1923, bred by Messrs. Routledge, Bleatarn Crofts, Crosby-on-Eden, Carlisle; *s.* Orton Squire 1831, *d.* Bleatarn Princess 3652 *by* Viscount Grey 1266.

3734 **II.** (£5.)—J. B. Smalley, Birkby Hall, Cark-in-Cartmel, Lancs, for **Stackhouse Monarch** 5865 (T.N., S.M.L., E. 14), born Aug. 4, 1923; *s.* Southley Gay Lord 3959, *d.* Southley Summer Rose 5541 *by* Royal Fortune 3023.

3731 **III.** (£3.)—John S. Jordan, for **Premier of Blackcoombe** 5831 (T. N., F.B.A., E. 31), born April 22, 1923, bred by A. H. Fox-Brockbank, Kirksanton, Silecroft; *s.* Southley Golden Gain 3958, *d.* Bowston Empress 4192 *by* Philip of Fauld 1834.

Class 422.—*Cumberland Boars, born in* 1924.[1]

3736 **I.** (£10, & Champion.[2])—John S. Jordan, Bowston, Kendal, for **Bowston Financier** 5750 (T.N., J.O.R., F. 17), born Jan. 9; *s.* Bowston Enterprise 4485, *d.* Bowston Snowdrop 5255 *by* Philip of Fauld 1834.

3735 **II.** (£5.)—Francis John Bell, Yew Tree Villa, Thomas Close, Calthwaite, Carlisle, for **Acme of Moorthwaite** 5726 (T.N., M.G.U., F. 11), born Jan. 31, bred by Matthew McGough, Moorthwaite, Wigton; *s.* Southley Gay Lord 3956, *d.* Silver Susie 4254 *by* Jupiter 1786.

3739 **III.** (£3.)—John Steel, M.R.C.V.S., Southley, Wigton, for **Southley Cup Bearer** 5858 (T.N., S.L.J., F. 19), born Jan. 25; *s.* Lord Long 4647, *d.* Southley Bloom 2693 *by* Tristram Shandy 429.

3737 **R. N.**—Frank Mortimer, Golden Grove, Llanasa, Holywell, for **Golden Fashion.**

Class 423.—*Cumberland Boars, born in* 1925.

3744 **I.** (£10, & R. N. for Champion.[2])—John S. Jordan, Bowston, Kendal, for **Bowston General** (T.N., J.O.R., G. 14), born Jan. 16; *s.* Bowston Model 4490, *d.* Barclose Orphan Girl 3452 *by* Parton Height 1242.

3746 **II.** (£5.)—John S. Jordan, for **Bowston Gerald** (T.N., J.O.R., G. 50), born March 14; *s.* Bowston Financier 4750, *d.* Bowston Eve 6080 *by* Southley Golden Gain 3958.

3747 **III.** (£3.)—John Steel, M.R.C.V.S., Southley, Wigton, for **Southley Hover-a-Blink** (T.N., S.L.J., G. 12), born Jan. 15; *s.* Southley Gay Lord 3956, *d.* Southley Soubriquet 4368 *by* Gold Mine 1768.

3741 **R. N.**—Mrs. Carleton Cowper, Carleton Hall, Penrith, for **Eamont Esther's Heir.**

Class 424.—*Cumberland Breeding Sows, born in or before* 1923.

3751 **I.** (£10, & Champion.[3])—John S. Jordan, Bowston, Kendal, for **Janet 2nd** 4169 (T.N., C. 8), born March 5, 1921, farrowed Feb. 12, bred by J. B. Threlkeld, Ashes, Wigton; *s.* Squire of Aikton 1262, *d.* Susette of Aikton 1294 *by* Prince Thomas of Aikton 409.

3752 **II.** (£5, & R. N. for Champion.[3])—John S. Jordan, for **Witch of Ashes** 4400 (T.N., T.K.D., C. 19), born Aug. 15, 1921, farrowed March 6, bred by J. B. Threlkeld, Ashes, Wigton; *s.* Squire of Aikton 1262, *d.* Witch of Aikton 1294 *by* Prince Thomas of Aikton House 409.

3756 **III.** (£3.)—John Steel, M.R.C.V.S., Southley, Wigton, for **Southley Soubriquet** 4368 (T.N., S.L.J., D. 14), born Jan. 28, 1922, farrowed Jan. 15; *s.* Gold Mine 1768, *d.* Southley Bloom 2693 *by* Tristram Shandy 429.

3750 **R. N.**—John S. Jordan, for **Bowston Jewel Girl.**

Class 425.—*Cumberland Sows, born in* 1924.

3760 **I.** (£10.)—John S. Jordan, Bowston, Kendal, for **Bowston Folly** 6088 (T.N., J.O.R., F. 30), born Jan. 20; *s.* Bowston Enterprise 4485, *d.* Janet 2nd 4189 *by* Squire of Aikton 1262.

3757 **II.** (£5.)—Mrs. Carleton Cowper, Carleton Hall, Penrith, for **Eamont Diana** (T.N., C.E.C., F. 8), born Jan. 21; *s.* Aikton House Favourite 4450, *d.* Eamont Esther 3204 *by* Barclose Testpiece 1178.

3765 **III.** (£3.)—John Steel, M.R.C.V.S., Southley, Wigton, for **Southley Sonsy Sue** 6279 (T.N., S.L.J., F. 12), born Jan. 21; *s.* Royal Fortune 3023, *d.* Conceit 2nd 4369 *by* Lord Row Res 1808.

3764 **IV.** (£2.)—John Steel, M.R.C.V.S., for **Southley Melody** 6283 (T.N., S.L.J., F. 22), born Jan. 25; *s.* Lord Long 4647, *d.* Southley Bloom 2693 *by* Tristram Shandy 429.

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[1] Prizes given by the Cumberland Pig Breeders' Association.

[2] Champion Prize of £5, given by the Cumberland Pig Breeders' Association, for the best Boar in Classes 421 to 423.

[3] Champion Prize of £5, given by the Cumberland Pig Breeders' Association for the best Sow in Classes 424 and 425.

3761 **R. N.**—JOHN S. JORDAN, for **Woodside Sonsy** (T.N., B.W.W., F. 9), born March 7, bred by W. Bainbridge & Son, Woodside Farm, Temple Sowerby; *s.* Bleatarn Excelsior 4473, *d.* Lizzie of Woodside 4817 *by* Paul of Scales Hall 3006.

Class 426.—*Two Cumberland Sows, born in* 1925.

3766 **I. (£10.)**—JOHN S. JORDAN, Bowston, Kendal, for **Bowston Graceful** (T.N. G. 19), and **Bowston Gracious Gift** (T.N. G. 21), born Jan. 16; *s.* Bowston Model 4490, *d.* Barclose Orphan Girl 3452 *by* Parton Height 1242.

3767 **II. (£5.)**—JOHN STEEL, M.R.C.V.S., Southley, Wigton, for sows (T.N., S.L.J., G. 8 and 9), born Jan. 15; *s.* Southley Gay Lord 3956, *d.* Southley Soubriquet 3468 *by* Gold Mine 1768.

3768 **III. (£3.)**—JOHN STEEL, M.R.C.V.S., for sows (T.N., S.L.J., G. 13 and 16), born Jan. 30 *s.* Royal Fortune 3023, *d.* Southley Bloom 2693 *by* Tristram Shandy 429.

Wessex Saddlebacks.

Class 427.—*Wessex Saddleback Boars, born in or before* 1923.

3772 **I. (£10, & R. N. for Champion.[1])**—A. J. KIRBY, Whitchurch, Ross-on-Wye, for **Offa Hero 1st**, born Jan. 2, 1923, bred by S. White, Hitchin; *s.* Offa Emperor 1170, *d.* Offa Agatha 5th *by* Kingswalden Monument 638.

3773 **II. (£5.)**—T. L. MARTIN, Ashe Warren, Overton, Hants, for **Ashe Plant 2nd** 650, born Jan. 29, 1921; *s.* Ashe Plant, 72, *d.* Caer Girdle 438 *by* Caer Kingmaker 9.

3770 **III. (£3.)**—ALFRED J. BUTLER, Bromham House Farm, Chippenham, for **Godalming Victor** 1669, born July 14, 1922, bred by A. Freeland, Tuesley Farm, Godalming; *s.* Ashe Mac 2nd 680, *d.* New Road Queen 1773.

3774 **IV. (£2.)**—DOLPHIN SMITH, Mackrey End, Harpenden, for **Harpenden True Type** 1464, born Aug. 3, 1922; *s.* Norman King Offa 219, *d.* Romsey True Type 930.

3775 **R. N.**—DOUGLAS VICKERS, Temple Dinsley, Hitchin, for **Oakley Prior.**

H. C.—3771. **C.**—3777.

Class 428.—*Wessex Saddleback Boars, born in* 1924, *before July* 1.[2]

3780 **I. (£10, Champion,[1] & R. N. for Champion.[3])**—H. G. LAKIN, Pipers Hall, Leamington, for **Pipers Oberon** 2441, born March 2; *s.* Sherfield Shackleton 815, *d.* Pipers Titania 2975 *by* Eastington Joker 277.

3779 **II. (£5.)**—DR. WILLIAM H. FORSHAW, Slythehurst, Ewhurst, Guildford, for **Slythehurst Bar None** 2336, born Jan. 2; *s.* Norman King Offa 219, *d.* Slythehurst Bracken 4938 *by* Ashe Mac 2nd 680.

3781 **III. (£3.)**—SIR ALFRED MOND, BART., M.P., Melchet Court, Romsey, Hants, for **Melchet Premier** 2452, born May 23; *s.* Melchet Stephen 6th 1698, *d.* Hemyock Namesake 7717 *by* Duke of Hemyock 1032.

3783 **R. N.**—R. B. TAYLOR & SONS, Hendford Lodge, Yeovil, for **Sockhill Tempest.**

Class 429.—*Wessex Saddleback Boars, born in* 1924, *on or after July* 1.

3784 **I. (£10.)**—DR. WILLIAM H. FORSHAW, Slythehurst, Ewhurst, Guildford, for **Bard of Slythehurst** 2615, born Dec. 16, bred by Mrs. Lillah Walker, Slythehurst, Surrey; *s.* Slythehurst Bar None 2336, *d.* Shillingler Music 5578 *by* Slythehurst Royal Oak 934.

3785 **II. (£5.)**—H. H. HARRIS, New Farm, Besford, Defford, Worcester, for **Besford King Norman** 2605, born July 13; *s.* Besford Richard 1960, *d.* Janet of Besford 4961 *by* Birtsmorton Down 350.

3786 **III. (£3.)**—T. L. MARTIN, Ashe Warren, Overton, Hants, for **Ashe Bonny Boy** 2603, born Sept. 2; *s.* Massell Nut 1672, *d.* Ashe Lassie 1st 10502 *by* Ashe Major 1219.

Class 430.—*Wessex Saddleback Boars, born in* 1925.

3798 **I. (£10.)**—STANLEY WHITE, Hammond End, Harpenden, for **Offa Champion Boy,** born Jan. 5; *s.* Offa Mac 1st 1913, *d.* Offa Monica 5032 *by* Offa Egbert 696.

3799 **II. (£5.)**—STANLEY WHITE, for **Offa King Norman,** born Jan. 5; *s.* Offa Mac 1st 1913, *d.* Pride of Ash 2nd 2014 *by* Fifield First 42.

3796 **III. (£3.)**—DOUGLAS VICKERS, Temple Dinsley, Hitchin, for **Preston Adrian,** born Jan. 25; *s.* Oakley Prior 1678, *d.* Offley Alison 8574 *by* Offa Dunstan 695.

3793 **IV. (£2.)**—H. G. LAKIN, Pipers Hall, Leamington, for **Pipers Benedick** 2613, born Jan. 6; *s.* Eastington Pagan 1838, *d.* Pipers Helen 5617 *by* Sherfield Shackleton 815.

3797 **R. N.**—DOUGLAS VICKERS, for **Preston Sphinx 1st.**

Class 431.—*Wessex Saddleback Breeding Sows, born in or before* 1923.

3803 **I. (£10, Champion,[3] & Champion.[4])**—A. FREELAND, Tuesley Farm, Godalming, for **Godalming Eugenie** 6468, born June 19, 1922, farrowed Jan. 26; *s.* Ashe Mac 2nd 680, *d.* Empress Eugenie 1103.

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[1] Champion Gold Medal, value £5 5*s.*, given by the Wessex Saddleback Pig Society, for the best Boar in Classes 427 to 430.

[2] Prizes, except Fourth and Fifth, given by the Wessex Saddleback Pig Society.

[3] Silver Challenge Cup, value Thirty Guineas, given by the Wessex Saddleback Pig Society, for the best Boar or Sow in Classes 427 to 433.

[4] Champion Gold Medal, value £5 5*s.*, given by the Wessex Saddleback Pig Society, for the best Sow in Classes 431 to 433.

3804 II. (£5.)—A. Freeland, for **Godalming Mollie** 5491, born March 6, 1922, farrowed Jan. 19; *s.* Ashe Mac 2nd 680, *d.* Easton Scout 526 *by* Melchet Cooper 2.

3802 III. (£3.)—Dr. William H. Forshaw, Slythehurst, Ewhurst, Guildford, for **Echo of Slythehurst** 9391, born Aug. 4, 1923, farrowed Jan. 7, bred by A. S. Williams, Ewhurst, Guildford; *s.* Slythehurst Forest King 1330, *d.* Godalming Eclipse 5283 *by* Oakley Tuesley 618.

3814 IV. (£2.)—Douglas Vickers, Temple Dinsley, Hitchin, for **Harpenden Vanity 2nd** 8531, born Feb. 1, 1923, farrowed Jan. 6, bred by Dolphin Smith, Harpenden; *s.* Brooke Prince 625, *d.* Harpenden Vain 3531 *by* Buscombe Hero 320.

3806 V. (£1.)—H. G. Lakin, Pipers Hill, Leamington, for **Pipers Perdita** 6897, born Sept. 27, 1922, farrowed Jan. 1; *s.* Sherfield Shackleton 815, *d.* Pipers Titania 2975 *by* Eastington Joker 277.

3809 R. N.—T. L. Martin, Ashe Warren, Overton, Hants, for **Noreen of Northington.**

H.C.—3810. C.—3813.

Class 432.—*Wessex Saddleback Sows, born in* 1924, *before July* 1.[1]

3825 I. (£10.)—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Noreen** 11676, born Jan. 28; *s.* Ashe Major 1219, *d.* Noreen of Northington 3644 *by* Ashe Plant 72.

3829 II. (£5.)—Douglas Vickers, Temple Dinsley, Hitchin, for **Preston Dulcie 2nd** 11153, born Jan. 3; *s.* Royston Cicero 1530, *d.* Offa Doreen 4845 *by* Offa Edmund 471.

3830 III. (£3.)—Stanley White, Hammond End, Harpenden, for **Offa Eleanor 1st** 11855, born Feb. 7; *s.* Offa Mac 1st 1913, *d.* Offa Rosana 1637.

3828 IV. (£2.)—R. B. Taylor & Sons, Hendford Lodge, Yeovil, for **Sockhill Snow White 4th** 11336, born Jan. 17; *s.* Eastington Rowan 735, *d.* Sockhill Snow White 5820 *by* Sockhill Pendarus 860.

3819 V. (£1.)—Claude Coram, Hartnolls, Tiverton, for **Hartnolls Blanche 1st** 11210, born Jan. 17; *s.* Colworth Prince 1616, *d.* Westbury Blanche 11th 5407 *by* Godalming Duke 581.

3823 R. N.—Sir Michael Lakin, Bart., The Cliff, Warwick, for **Pipers Dinah.**

Class 433.—*Wessex Saddleback Sows, born in* 1924, *on or after July* 1.[1]

3833 I. (£10, & R. N. for Champion.[2])—H. G. Lakin, Pipers Hill, Leamington, for **Pipers Marian** 12109, born July 21; *s.* Eastington Pagan 1838, *d.* Pipers Viola 5620 *by* Sherfield Shackleton 815.

3835 II. (£5.)—T. L. Martin, Ashe Warren, Overton, Hants, for **Ashe Lassie 4th** 12265, born Sept. 2; *s.* Mussell Nut 1672, *d.* Ashe Lassie 1st 10502 *by* Ashe Major 1219.

3839 III. (£3.)—Dolphin Smith, Mackrey End, Harpenden, for **Welwyn Pearl 4th** 11698, born July 18, bred by George Baron, Welwyn; *s.* Brandon Admiral 1463, *d.* Ayot Emily 4th 7084.

3832 IV. (£2.)—Dr. William H. Forshaw, Slythehurst, Ewhurst, Guildford, for **Slythehurst Charm** 11805, born July 31; *s.* Kingsland Charlie 1812, *d.* Slythehurst Bracken 4938 *by* Ashe Mac 2nd 680.

3838 R. N.—Mrs. Arthur Sherston, Otley Hall, Ipswich, for **Otley Lilian.**

Class 434.—*Two Wessex Saddleback Sows, born in* 1925.

3847 I. (£10.)—Stanley White, Hammond End, Harpenden, for **Offa Queen Ann 1st** and **Offa Queen Ann 2nd,** born Jan. 5; *s.* Offa Mac 1st 1913, *d.* Offa Monica 5032 *by* Offa Egbert 696.

3843 II. (£5.)—H. H. Harris, New Farm, Besford, Defford, Worcester, for **Besford Rose 11th** and **12th,** born Jan. 10; *s.* Shillinglee Swell 2002, *d.* Besford Rose 6930 *by* Eastington Gambler 584.

3846 III. (£3.)—Douglas Vickers, Temple Dinsley, Hitchin, for **Preston Vain** and **Preston Vain 2nd,** born Jan. 6; *s.* Norman King Offa 219, *d.* Harpenden Vanity 2nd 8531 *by* Brook Prince 625.

3844 R. N.—H. G. Lakin, Pipers Hill, Leamington, for **Pipers Mary** and **Pipers May.**

H. C.—3841. C.—3845.

Essex.

Class 435.—*Essex Boars, born in or before* 1923.

3849 I. (£10.)—Charles Cousins, Jenkins, Stisted, Braintree, for **Peace Goliath** 1553 (T.N. 5876), born Jan. 8, 1923; *s.* Peace Field Marshal 977, *d.* Walden Treasure 2nd 3920.

3848 II. (£5.)—A. J. Cousins, Cressing Lodge, Braintree, for **Cressing Angus 4th** 1985 (T.N. 7525), born July 12, 1923; *s.* Tillyfour Angus 811, *d.* Cressing Duchess 8th 5924 *by* Cressing Major 269.

3852 III. (£3.)—J. Reginald Tinney, Rickling, Newport, Essex, for **Durrington Vicar** 1831 (T.N. 6894), born June 30, 1923, bred by Sir W. H. N. Goschen, K.B.E., Durrington House, Harlow; *s.* Chelmer Archbishop 789, *d.* Bovills Pride 5382 *by* Easton Duke 3rd 275.

3850 R. N.—A. T. Greenslade, Little Walden Park, Saffron Walden, for **Walden Reserve 2nd.**

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[1] Prizes, except Fourth and Fifth, given by the Wessex Saddleback Pig Society.

[2] Champion Gold Medal, value £5 5*s.*, given by the Wessex Saddleback Pig Society, for the best Sow in Classes 431 to 433.

Class 436.—*Essex Boars, born in* 1924.

3855 **I. (£10, & R. N. for Champion.[1])**—Kemsley & Kemsley, Great Wakering, Essex, for **Barling Woodman** 2405 (T.N. 8710), born April 14; *s.* Woolmer Soldier 1497, *d.* Barling Ruby 6646 *by* Chelmer Cornsack 745.

3853 **II. (£5.)**—A. J. Cousins, Cressing Lodge, Braintree, for **Cressing Claudius 4th** 2467 (T.N. 3693), born June 4; *s.* Fryerning Claudius 6th 1529, *d.* Cressing Duchess 36th 10252 *by* Tillyfour Angus 811.

3858 **III. (£3.)**—J. Reginald Tinney, Rickling, Newport, Essex, for **Rickling Reignier 9th** 2527 (T.N. 9166), born May 11; *s.* Barnston Reignier 771, *d.* Rickling Treasure 4th 6876 *by* Walden Champion 843.

3856 **R. N.**—R. Browning Smith, The Brook, Great Tey, Kelvedon, for **Tewes Conqueror.**
H. C.—3854.

Class 437.—*Essex Boars, born in* 1925.

3861 **I. (£10.)**—A. J. Cousins, Cressing Lodge, Braintree, for boar, born Jan. 10; *s.* Fryerning Claudius 6th 1529, *d.* Cressing Pickle 2nd 11070 *by* Ramsey Powerful 1347.

3864 **II. (£5.)**—J. Reginald Tinney, Rickling, Newport, Essex, for **Thorley Jay**, born Jan. 6, bred by J. Tinney & Son, Thorley Hall, Bishop's Stortford; *s.* Jupiter 1357, *d.* Thorley Blossom 5593, *by* Premier of Thorley 1295.

3863 **III. (£3.)**—W. Lawrence Taylor, Gallywood, Chelmsford, for **Gallywood Emperor 5th**, born Jan. 17; *s.* Walden Generosity 993, *d.* Gallywood Amy 16th 11536 *by* Fryerning Farmer 617.

3860 **R. N.**—H. S. Ashton, Trueloves, Ingatestone, for **Trueloves Admiral 18th.**

Class 438.—*Essex Breeding Sows, born in or before* 1923.

3866 **I. (£10.)**—A. J. Cousins, Cressing Lodge, Braintree, for **Cressing Charity 11th** 11086 (T.N. 7543), born Aug. 6, 1923, farrowed Jan. 2; *s.* Tillyfour Angus 811, *d.* Cressing Charity 1358 *by* Peace Benjamin 83.

3871 **II. (£5.)**—J. Reginald Tinney, Rickling, Newport, Essex, for **Rickling Primrose 3rd** 11420 (T.N. 7406), born June 27, 1923, farrowed Feb. 2; *s.* Barnston Reignier 771, *d.* Thorley Primrose 4th 5164 *by* Chelmshoe Prince 245.

3868 **III. (£3.)**—Kemsley & Kemsley, Great Wakering, Essex, for **Barling Matilda** 10498 (T.N. 7134), born July 2, 1923, farrowed April 11; *s.* Barling Sailor 1039, *d.* Barling Flo 5552 *by* Chelmer Cornsack 745.

3867 **R. N.**—Charles Cousins, Jenkins, Stisted, Braintree, for **Walden Thrifty 6th.**

Class 439.—*Essex Sows, born in* 1924.[2]

3875 **I. (£10, & Champion.[1])**—A. J. Cousins, Cressing Lodge, Braintree, for **Cressing Daphne 13th** 12552 (T.N. 8026), born Jan. 4; *s.* Tillyfour Angus 811, *d.* Cressing Daphne 5th 5916 *by* Cressing Majestic 267.

3882 **II. (£5.)**—J. Reginald Tinney, Rickling, Newport, Essex, for **Thorley Tassie** (T.N. 9443), born July 29, bred by J. Tinney & Son, Thorley Hall, Bishop's Stortford; *s.* Howletts Major 1763, *d.* Thorley Quince 8144; *by* Admiral 2nd of Thorley 1055.

3876 **III. (£3.)**—Charles Cousins, Jenkins, Stisted, Braintree, for **Homage of Peace** 13682 (T.N. 9020), born July 5, bred by J. Cousins, Great Leighs, Chelmsford; *s.* Barling Corporal 1043, *d.* Leez Bluebell 5956 *by* Porters Polygram 443.

3873 **IV. (£2.)**—Robert Chanin, Tilty Hill Farm, Duton Hill, Dunmow, for **Tilty Lilly** (T.N. 9621), born July 3; *s.* Cressing Duke 2nd 1353, *d.* Tilty Lady *by* Margaretting Columbus 677.

3881 **R. N.**—J. Reginald Tinney, for **Thorley Selected.**
H. C.—3874. **C.**—3872.

Class 440.—*Two Essex Sows, born in* 1925.

3883 **I. (£10.)**—H. S. Ashton, Trueloves, Ingatestone, for **Trueloves Greengage and Truelove Goldfinch**, born Jan. 2; *s.* Cressing Major 3rd 1563, *d.* Trueloves Princess 3624 *by* Barnston Claudius 1st 7.

3886 **II. (£5.)**—R. Browning Smith, The Brook, Great Tey, Kelvedon, for **Brook Superbus 14th** 9801 and **15th** 9802, born Jan. 4; *d.* Brook Superbus 2nd 2328 *by* Brook Masterpiece 1613.

3885 **III. (£3.)**—R. Browning Smith, for **Brook Oak 7th** 9803 and **8th** 9804, born Jan. 1; *d.* Brook Ayah 2nd 4382 *by* Brook Masterpiece 1613.

3884 **R. N.**—Charles Cousins, Jenkins, Stisted, Braintree.

Long White Lop-Eared.

Class 441.—*Long White Lop-Eared Boars, born in or before* 1924.

3887 **I. £10.)**—H. E. Bennett, Hawkenbury, Staplehurst, Kent, for **Netherton Erle King** 790 born Feb. 16, 1924, bred by S. Ward, Netherton House, Yelverton, Devon; *s.* Anderton Consideration 244, *d.* Netherton Emisie 593 *by* Quither General 2.

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[1] Silver Champion Cup, value Ten Guineas, given by the Essex Pig Society, for the best Boar or Sow in Classes 435 to 439.

[2] Prizes, except Fourth, given by the Essex Pig Society.

3891 II. (£5.)—Alfred A. Partridge, Mordref, Plympton, Devon, for **Priory Mill Man 878,** born May 24, 1924; *s.* Forda Marvel 268, *d.* Priory Mill Maid 1149 *by* Quither Masterpiece 122.

3890 III. (£3.)—Louis Fleischmann, Chetwode Manor, Buckingham, for **Chetwode Commander,** born Aug. 7, 1924; *s.* Chetwode Attraction 560, *d.* Chetwode Alice 2051 *by* Crelake Perfection 242.

3889 R. N.—Louis Fleischmann, for **Chetwode Claud.**

Class 442.—*Long White Lop-Eared Boars, born in* 1925.[1]

3898 I. (£10.)—W. J. Westlake, Godwell, Ivybridge, Devon, for **Godwell Ben 934,** born Jan. 26; *s.* Ipplepen Sultan 552, *d.* Colwill Bobby 3205 *by* Harberton Premier 86.

3895 II. (£5.)—William Henry Neal, Yealmpstone Farm, Plympton, Devon, for **Yealmpstone Ben 2nd 936,** born Jan. 25; *s.* Netherton Erle King, *d.* Yealmpstone Princess 73 *by* Wizaller Bacon Bay 38.

3896 III. (£3.)—Alfred A. Partridge, Mardref, Plympton, Devon, for **Priory General 2nd,** born March 15; *s.* Forda Marvel 268, *d.* Priory Princess 3213 *by* Erme General 166.

3899 R. N.—Stanley White, Hammond End, Harpenden, for **Offing Bar None.**

Class 443.—*Long White Lop-Eared Breeding Sows, born in or before* 1924.

3903 I. (£10.)—Alfred A. Partridge, Mordref, Plympton, Devon, for **Priory Lassie 823,** born Sept. 14, 1922, farrowed Jan. 3; *s.* Quither Masterpiece 122, *d.* Torlands Amiable 159 *by* Roborough Jumbo 20.

3904 II. (£5.)—William Elijah Smith, junr., Wenhaston Hall, Halesworth, Suffolk, for **Yealmpstone Queen 71,** born Dec. 11, 1917, farrowed Feb. 15, bred by W. H. Neal, Lower Yealmpstone, Plympton, Devon.

3900 III. (£3.)—H. E. Bennett, Hawkenbury, Staplehurst, Kent, for **Yealmpstone Progress 2679,** born Dec. 21, 1923, farrowed March 10, bred by W. H. Neal, Yealmpstone Farm, Plympton, Devon; *s.* Harberton Premier 86, *d.* Yealmpstone Primrose 4th 413 *by* Quither General 2.

3905 R. N.—Stanley White, Hammond End, Harpenden, for **Godwell Sunstar.**

Class 444.—*Two Long White Lop-Eared Sows, born in* 1925.[1]

3908 I. (£10.)—W. J. Westlake, Godwell, Ivybridge, Devon, for **Godwell Beauty 1st** 3391 and **2nd** 3403, born Jan. 26; *s.* Ipplepen Sultan 552, *d.* Colwill Bobby 3205 *by* Harberton Primus 86.

3907 II. (£5.)—William Henry Neal, Yealmpstone Farm, Plympton, Devon, for **Yealmpstone Flower** 3399 and 3401, born Jan. 10; *s.* Netherton Earl King, *d.* Yealmpstone Flower 2nd *by* Crelake Perfection 242.

3909 III. (£3.)—Stanley White, Hammond End, Harpenden, for **Offing Bonny Lass 1st** and **2nd,** born Jan. 2; *s.* Priory Jumbo, *d.* Waddon Offing Anna 34th 1253 *by* Netherton Defender 140.

Welsh.

Class 445.—*Welsh Boars, born in or before* 1925.

3910 I. (£10.)—Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham, for **Gwersyllt Prince Elwyn 2nd,** born Aug. 31, 1924; *s.* Chelford Acorn King 1st 91, *d.* Gwersyllt Catalina 3rd 415 *by* Tyssul Cawr 4.

3911 II. (£5.)—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for boar, born Jan. 18, 1925, bred by Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham; *s.* Brigam Masterpiece 142, *d.* Gwersyllt Duchess 4th 480 *by* Tyssul Cawr 4.

Class 446.—*Welsh Breeding Sows, born in or before* 1924.[2]

3913 I. (£10.)—Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham, for **Gwersyllt Barbario** 210, born July 26, 1921, farrowed Jan. 29, bred by James Evans, Ffynonlas Isaf, Blaenwaun, Whitland, S. Wales; *s.* Ap Gronw 2, *d.* Peggy Elwyn 13.

3914 II. (£5.)—John J. Lynch, Glascoed Hall, Wrexham, for **Glascoed Angela** 221, born Aug. 21, 1921, farrowed Jan. 2, bred by D. Evans, Gilfach, Llangain; *s.* Ap Gronw 2, *d.* Alice Curig 14.

3915 III. (£3.)—F. C. Minoprio, Haulfryn Home Farm, Abersoch, for **Gwersyllt Duchess 4th** 480, born Aug. 17, 1923, farrowed Jan. 18, bred by Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham; *s.* Tyssul Cawr 4, *d.* Gilfach Ceri 252 *by* Shan Tiger 17.

3912 R. N.—Captain N. Milne-Harrop, for **Peggy Elwyn.**

Class 447.—*Two Welsh Sows, born in* 1925.[2]

3921 I. (£10.)—Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham, for **Gwersyllt Lady Elwyn 6th** and **7th,** born Jan. 1; *s.* Chelford Acorn King 1st 91, *d.* Gwersyllt Bundle 209 *by* Ap Gronw 2.

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[1] Prizes given by the Long White Lop-Eared Pig Society.

[2] Prizes given by the Welsh Pig Society.

3922 **II.** (£5.)—F. C. Minoprio, Haulfryn Home Farm, Abersoch for **Haulfryn Mary** (T.N., H. 1) and **Haulfryn Jane** (T.N., H. 2), born Jan. 18, bred by Captain N. Milne-Harrop, Gwersyllt Hill, Wrexham; *s.* Brigam Masterpiece 142, *d.* Gwersyllt Duchess 4th 480 *by* Tyssul Cawr 4.

3919 **III.** (£3.)—Dinam Estates Company, Llandinam Hall Farm, Llandinam, Mont., for sows, born Feb. 13; *s.* Masterpiece of Peniel, *d.* Dinam Actress *by* Gilfach Clinker.

3918 **R. N.**—David Percival Barnett, Walterston, Llancarfan, Cowbridge, for **Walterston Perfection** and **Walterston Peaceful.**

FARM AND DAIRY PRODUCE OF THE UNITED KINGDOM.

Butter.

Class 448.—*Two Pounds of Fresh Butter, without any salt, made up in plain pounds, from the milk of Channel Island, Devon or South Devon Cattle and their crosses.*

10 **I.** (£4.)—Mrs. L. R. Mildon, Mead Down, Rackenford, Crediton.
12 **II.** (£2.)—The Marquis of Northampton, D.S.O., Castle Ashby, Northants.
2 **III.** (£1.)—T. R. Bolitho, Trengwainton, Penzance.
7 **IV.** (10s.)—Mrs. M. Heywood, The Barton, Loxbeare, Tiverton.
15 **V.** (5s.)—Miss Muriel M. Shaw, Coxwell Lodge, Faringdon.
14 **R. N.**—D. F. Pennant, Nantlys, St. Asaph.
H. C.—3, 4, 11, 16.

Class 449.—*Two Pounds of Fresh Butter, without any salt, made up in plain pounds, from the milk of cattle of any breeds or cross other than those mentioned in Class 448.*

33 **I.** (£4.)—G. Sumner, Stallbrook Farm, Derrington, Stafford.
30 **II.** (£2.)—The Misses Roberts, Bwlch-y-Maen, Dolwyddelen, North Wales.
21 **III.** (£1.)—Mrs. Amelia Cookson, Primrose Hill, Kelsall, Chester.
26 **IV.** (10s.)—Mrs. W. E. Mudd, Thornthwaite, Darley, Harrogate.
31 **V.** (5s.)—Miss S. H. Robinson, Red House Farm, Liverton, Loftus, Yorks.

Class 450.—*Two Pounds of Fresh Butter, slightly salted, made up in plain pounds, from the milk of Channel Island, Devon or South Devon Cattle and their crosses.*

43 **I.** (£4.)—Mrs. L. R. Mildon, Mead Down, Rackenford, Crediton.
45 **II.** (£2.)—The Marquis of Northampton, D.S.O., Castle Ashby, Northants.
42 **III.** (£1.)—Captain N. C. Livingstone-Learmonth, Fifehead Magdalen, Gillingham, Dorset.
40 **IV.** (10s.)—Mrs. M. Heywood, The Barton, Loxbeare, Tiverton.
35 **V.** (5s.)—T. R. Bolitho, Trengwainton, Penzance.
48 **R. N.**—The Duke of Portland, K.G., Welbeck Abbey, Worksop.
H. C.—34, 39, 41, 44.

Class 451.—*Two Pounds of Fresh Butter, slightly salted, made up in plain pounds, from the milk of cattle of any breed or cross other than those mentioned in Class 450.*

65 **I.** (£4.)—Mrs. R. Spann, Daleford Lane, Sandiway, Northwich.
61 **II.** (£2.)—The Misses Roberts, Bwlch-y-Maen, Dolwyddelen.
63 **III.** (£1.)—Miss S. H. Robinson, Red House Farm, Liverton, Loftus.
60 **IV.** (10s.)—C. H. Roberts, Rhyd-y-Bill, Rhewl, Ruthin.
54 **V.** (5s.)—Mrs. Amelia Cookson, Primrose Hill, Kelsall, Chester.
62 **R. N.**—Mrs. J. M. Robertson, Holly House Farm, Mere, Knutsford.
H. C.—57, 66, 67.

Class 452.—*Three Pounds of Fresh Butter, slightly salted, made up in pounds in the most attractive marketable designs.*

71 **I.** (£4.)—Mrs. M. Heywood, The Barton, Loxbeare, Tiverton.
72 **II.** (£2.)—Mrs. L. R. Mildon, Mead Down, Rackenford, Crediton.
77 **III.** (£1.)—Mrs. M. Pooley, Haughton, Shifnal, Salop.
80 **IV.** (10s.)—Miss Muriel M. Shaw, Coxwell Lodge, Faringdon.
75 **V.** (5s.)—The Marquis of Northampton, D.S.O., Castle Ashby, Northants.
73 **R. N.**—J. Pierpont Morgan, Wall Hall, Aldenham, Watford.
H. C.—76.

Class 453.—*Three Pounds of Fresh Butter, slightly salted, made up in pounds, and packed in non-returnable boxes for transmission by rail or parcel post.*

85 I. (£4.)—The Marquis of Northampton, D.S.O., Castle Ashby, Northants.
83 II. (£2.)—Mrs. L. R. Mildon, Mead Down, Rackenford, Crediton.
82 III. (£1.)—T. R. Bolitho, Trengwainton, Penzance.
84 R. N.—Mrs. W. E. Mudd, Thornthwaite, Darley, Harrogate.

Cheshire Cheese.[1]

Made in 1925, *except Class* 460.

Class 454.—*Three Cheshire Cheeses (Coloured), not less than* 40 *lb. each, made, owned and exhibited by any occupier of land exceeding* 150 *acres.*

142 I. (£10, & Champion.[2])—Charles E. Parton, Haughton Hall Farm, Tarporley.
103 II. (£8.)—Charles A. G. Cummins, Gosland Green Farm, Bunbury, Tarporley.
148 III. (£6.)—W. A. Robinson, Egerton Hall, Malpas.
90 IV. (£4.)—J. Basford, Bridgemere, Nantwich.
153 V. (£2.)—George Sutton, Pewitt Hall, Hunsterson, Nantwich.
120 R. N.—Oliver Hesketh, Cholmondeston, Winsford, Cheshire.
H. C.—101, 139, 143, 160, 162. C.—91, 92, 123, 127, 131.

Class 455.—*Three Cheshire Cheeses (Uncoloured), not less than* 40 *lb. each, made, owned, and exhibited by any occupier of land exceeding* 150 *acres.*

195 I. (£10.)—W. R. Lea, Lacon Hall, Wem, Salop.
197 II. (£8.)—F. A. Moore, The Grange, Checkley, Nantwich.
188 III. (£6.)—C. F. Hobson, Weston Hall, Standon, Eccleshall, Staffs.
189 IV. (£4.)—W. H. Hobson, Woodhey Hall, Nantwich.
198 V. (£2.)—W. E. Moore, Baddiley Farm, Nantwich.
190 R. N.—Fred Huntbach, Moor Hall, Aston, Nantwich.
H. C.—168, 172, 177, 183, 192. C.—174, 175, 184, 187, 214.

Class 456.—*Three Cheshire Cheeses (Coloured), not less than* 40 *lb. each, made, owned, and exhibited by any occupier of land exceeding* 80 *and not exceeding* 150 *acres.*

235 I. (£10, & R. N. for Champion.[2])—F. W. Hesketh, Firs Bank, Cholmondeston, Nantwich.
219 II. (£8.)—H. T. Bonell, Dunhall Hall, Dunham Hill, Warrington.
238 III. (£6.)—Albert Hughes, Willington Cross, Malpas.
254 IV. (£4.)—Samuel Sumner, Wolvesacre Hall, Iscoyd, Whitchurch, Salop.
237 V. (£2.)—John Houlbrooke, Church Farm, Hargrave, Chester.
218 R. N.—The Exors. of the late F. W. Boffey, Bridge Farm, Henhall, Nantwich.
H. C.—221, 225, 228, 244, 253. C.—229, 230, 231, 236, 245.

Class 457.—*Three Cheshire Cheeses (Uncoloured), not less than* 40 *lb. each, made, owned, and exhibited by any occupier of land exceeding* 80 *and not exceeding* 150 *acres.*

293 I. (£8.)—James Weston, Bell o' th' Hill, Tushingham, Whitchurch, Salop.
271 II. (£6.)—James Edwards, Ivy End Farm, Half-Way House, Shrewsbury.
289 III. (£4.)—Philip Sumner, Ivy House, Frith, Wrenbury.
276 IV. (£2.)—John Houlbrooke, Church Farm, Hargrave, Chester.
272 V. (£1.)—John Furber, Broomhall, Nantwich.
286 R. N.—George Platt, Eaton, Tarporley.
H. C.—277, 280, 287, 294, 295. C.—263, 270, 275, 279, 290.

Class 458.—*Three Cheshire Cheeses (Coloured), not less than* 30 *lb. each, made, owned, and exhibited by any occupier of land not exceeding* 80 *acres.*

308 I. (£8, & Champion.[3])—A. P. Sadler, Mount Pleasant, Newhall, Nantwich.
310 II. (£6.)—H. Vickers, Maes-y-Groes, Iscoyd, Whitchurch, Salop.
296 III. £4.)—R. H. Barnett, Robinson's Corner Farm, Wistaston, Nantwich.
313 IV. (£2.)—Wilfred West, Chesterton Farm, Ridley, Tarporley.
302 V. (£1.)—Thomas E. Hughes, Spurstow, Tarporley.
299 R. N.—Samuel Dutton, Oak Farm, Haughton, Tarporley.
H. C.—298, 300. C.—314.

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[1] £30 towards these Prizes were given by the Cheshire Cheese Federation, and £5 by the Chester Local Committee.

[2] Champion Cup, value One Hundred Guineas, given by the members of the Cheshire Hunt, for the best exhibit of Cheshire Cheese in Classes 454 to 457. Open to occupiers residing within the limits of the country hunted over by the Cheshire Hounds.

[3] Champion Cup, value Fifty Guineas, given by the members of the Cheshire Hunt, for the best exhibit of Cheshire Cheese in Classes 458 and 459. Open to occupiers residing within the limits of the country hunted over by the Cheshire Hounds.

Class 459.—*Three Cheshire Cheeses (Uncoloured), not less than* 30 *lb. each, made, owned, and exhibited by any occupier of land not exceeding* 80 *acres.*

329 I. (£8, & R. N. for Champion.[1])—A. P. Sadler, Mount Pleasant, Newhall, Nantwich.
332 II. (£6.)—Wilfred West, Chesterton Farm, Ridley, Tarporley.
317 III. (£4.)—Charles Boffey, Corner Farm, Wettenhall, Winsford.
331 IV. (£2.)—H. Vickers, Maes-y-Groes, Iscoyd, Whitchurch, Salop.
319 V. (£1.)—Ben Eastwood, Manor Farm, Hinton, Whitchurch, Salop.
324 R. N.—Richard Maddocks, Bay Tree Farm, Bronington, Whitchurch, Salop.
H. C.—322, 327. C.—325, 326.

Class 460.—*Three Cheshire Cheeses (Coloured or Uncoloured), not less than* 30 *lb. each, made during the* 1924 *season.*

349 I. (£15.)—W. H. Hobson, Woodhey Hall, Nantwich.
366 II. (£12.)—A. P. Sadler, Mount Pleasant, Newhall, Nantwich.
375 III. (£8.)—Charles Weaver, Goldsmith House, Burleydam, Whitchurch, Salop.
362 IV. (£6.)—Charles E. Parton, Haughton Hall Farm, Tarporley.
373 V. (£4.)—John Vernon, Barhill Farm, Tushingham, Whitchurch, Salop.
369 R. N.—John Simister, Calverhall, Whitchurch, Salop.
H. C.—342, 343, 346, 357, 378. C.—335, 341, 370, 371, 376.

Other Varieties of Cheese.

Made in 1925.

Class 461.—*Two Lancashire Cheeses, not less than* 40 *lb. each.*

381 III. (£2.)—William Duckworth, Ribby Hall Dairy, Kirkham.

Class 463.—*Two Cheddar Cheeses, not less than* 50 *lb. each.*

396 I. (£5.)—F. Portch, Leigh Farm, Wincanton.
395 II. (£3.)—H. H. Pickford, Manor Farm, Patney, Devizes.
394 III. (£2.)—F. G. Nurse & Sons, Wick Farm, Coxley, Wells, Somerset.
392 IV. (10s.)—George Moore, Folby Farm, Polsham, Wells, Somerset.
393 V. (5s.)—Miss Hilda Naish, Farncombe Farm, Doulting, Shepton Mallet.
391 R. N.—George McDowall, South Boreland, Dunvagil, Wigtownshire.

Class 464.—*Two Cheddar Truckles.*

409 I. (£5.)—John Taylor, White House Farm, Earthcott Green, Alveston.
405 II. (£3.)—Miss Veronica Naish, Farncombe Farm, Doulting, Shepton Mallet.
407 III. (£2.)—F. Portch, Leigh Farm, Wincanton.
410 IV. (10s.)—Edward Walter, West Forest Farm, Gear Hill, Maiden Bradley.
402 V. (5s.)—James P. Hunter, Castle Sinniness, Glenluce.
406 R. N.—H. H. Pickford, Manor Farm, Patney, Devizes.

Class 465.—*Two Stilton Cheeses.*

416 I. (£5.)—Long Clawson Dairy, Ltd., Long Clawson, Melton Mowbray.
425 II. (£3.)—The Misses F. and J. Webster, Saxelbye, Melton Mowbray.
420 III. (£2.)—Stathern and District Dairy, Stathern, Melton Mowbray.
417 IV. (10s.)—J. M. Nuttall & Co., Ltd., Dove Dairy, Hartington, Buxton.
415 V. (5s.)—Henry Knight & Co., The Cheese Dairy, Seagrave, Loughborough.
422 R. N.—Henry Thompson & Sons, Ltd., Nether Broughton, Melton Mowbray.

Class 466.—*Two Wensleydale Cheeses (Stilton shape).*

428 I. (£5.)—Miss B. J. Mudd, Aldborough Dairy, Boroughbridge, Yorks.
427 II. (£3.)—Miss Rachel James, Llancayo, Usk, Mon.
430 III. (£2.)—Miss M. M. Sykes, Linton Spring Dairy, Wetherby.
429 R. N.—Alfred Rowntree & Son, Coverham, Middleham, Yorks.

Class 467.—*Two Leicestershire Cheeses.*

433 I. (£5.)—Herbert Richardson, The Orchards, Cotesbach, Rugby.
436 II. (£3.)—Francis W. Tomlinson, Home Farm, Ashby Parva, Rugby.
431 III. (£2.)—John Harrison, Pailton, Rugby.
432 R. N.—Henry Knight & Co., The Cheese Dairy, Seagrave, Loughborough.

Class 468.—*Two Caerphilly Cheeses.*

437 I. (£5.)—Mrs. A. Blatchford, Arundell Hotel, Lifton, Devon.
441 II. (£3.)—Miss Rachel James, Llancayo, Usk, Mon.
439 III. (£2.)—Cox & Sons, The Creamery, Haverfordwest.
443 R. N.—Charles Woodward, Rookery Farm, Vole Mark, Highbridge.

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[1] Champion Cup, value Fifty Guineas, given by the members of the Cheshire Hunt, for the best exhibit of Cheshire Cheese in Classes 458 and 459. Open to occupiers residing within the limits of the country hunted by the Cheshire Hounds.

Class 469.—*Two Small Cheeses, not exceeding* 6 *lb. each, of Cheddar or Cheshire character.*

460 I. (£4.)—Miss Hilda Naish, Farncombe Farm, Doulting, Shepton Mallet.
470 II. (£2.)—Edward Walter, West Forest Farm, Gear Hill, Maiden Bradley.
464 III. (£1.)—H. H. Pickford, Manor Farm, Patney, Devizes.
467 IV. (10s.)—A. P. Sadler, Mount Pleasant, Newhall, Nantwich.
450 V. (5s.)—J. T. Fortnam, The Rudge Manor, Ashley, Market Drayton.
445 R. N.—Mrs. A. Blatchford, Arundell Hotel, Lifton, Devon.

Class 470.—*Two Small Cheeses, not exceeding* 6 *lb. each, of Stilton or Wensleydale character.*

476 I. (£4.)—J. M. Nuttall & Co., Ltd., Dove Dairy, Hartington, Buxton.
475 II. (£2.)—Miss B. J. Mudd, Aldborough Dairy, Boroughbridge, Yorks.
479 III. (£1.)—Fred Webster, Shoby Priory, Melton Mowbray.
480 R. N.—The Misses M. F. and J. Webster, Saxelbye, Melton Mowbray.

Class 471.—*Two Soft Cheeses, made from Whole Milk.*

481 I (£4.)—Miss Rachel James, Llancayo, Usk, Mon.
487 II. (£2.)—Fred Webster, Shoby Priory, Melton Mowbray.
484 III. (£1.)—Mrs. William J. T. Pantall, Kilkington Manor, Staunton-on-Wye.
483 R. N.—Miss B. J. Mudd, Aldborough Dairy, Boroughbridge, Yorks.

Class 472.—*Two Cheeses, made from Cream without the addition of Rennet.*

495 I. (£4.)—Mrs. William J. T. Pantall, Kilkington Manor, Staunton-on-Wye.
492 II. (£2.)—Captain N. C. Livingstone-Learmonth, Fifehead Magdalen, Gillingham, Dorset.
488 III. (£1.)—T. R. Bolitho, Trengwainton, Penzance.
496 IV. (10s.)—The Duke of Portland, K.G., Welbeck Abbey, Worksop.
498 V. (5s.)—Fred Webster, Shoby Priory, Melton Mowbray.
499 R. N.—Lt.-Col. Sir A. G. Weigall, K.C.M.G., Petwood, Woodhall Spa.

Cider.

Class 473.—*Six Bottles of Dry Cider, made in* 1924.

503 I. (£3.)—The Quantock Vale Cider Co., Ltd., North Petherton, Bridgwater.
501 II. (£2), 502 III. (£1), & 500 R. N.—Herbert J. Davis, Goldsborough Farm, Sutton Montis, Yeovil.

Class 474.—*Six Bottles of Sweet Cider, made in* 1924.

504 I. (£3), & 506 R. N.—Sir Ian Heathcoat Amory, Bart., Knightshayes Court, Tiverton.
508 II. (£2.)—Herbert J. Davis, Goldsborough Farm, Sutton Montis, Yeovil.
510 III. (£1), & 511 IV. (10s.)—The Quantock Vale Cider Co., Ltd., North Petherton Bridgwater.
H. C.—507. C.—505.

Class 475.—*Six Bottles of Cider, made before* 1924.

515 I. (£3), 514 II. (£2), & 513 III. (£1.)—Sir Ian Heathcoat Amory, Bart., Knightshayes Court, Tiverton.
516 R. N.—Herbert J. Davis, Goldsborough Farm, Sutton Montis, Yeovil.
H. C.—518. C.—517.

Wool.[1]

Of 1925 *clip.*

Class 476.—*Three Fleeces of Oxford Down Wool.*

522 I. (£3), & 523 II. (£2.)—George Harrison, Gainford Hall, Darlington.
525 III. (£1.)—Hugh W. Stilgoe, The Grounds, Adderbury, Banbury.

Class 477.—*Three Fleeces of Shropshire Wool.*

528 I. (£3.)—N. J. Nunnerley, Tern Hill House, Market Drayton.
530 II. (£2), & 529 III. (£1.)—E. Craig Tanner, Eyton-on-Severn, Cross Houses, Salop.
526 R. N.—William Everall, Shrawardine Castle, Shrewsbury.

Class 478.—*Three Fleeces of Southdown Wool.*

537 I. (£3.)—Sir Henry Whitehead, Stagenhoe Park, Welwyn.
538 II. (£2.)—J. K. Williamson, Derwen Hall, Corwen.
533 III. (£1.)—Lady Ludlow, Luton Hoo, Luton.
532 R. N.—Mrs. Leatham, The Manor, Bagendon, Cirencester.

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[1] The Second and Third Prizes in these Classes were given by the respective Flock Book Societies.

Class 479.—*Three Fleeces of Hampshire Down Wool.*

542 I. (£3), & 543 II. (£2.)—WILLIAM TODD, Little Ponton Grange, Grantham.
539 III. (£1.)—JAMES GOLDSMITH, Blendworth, Horndean, Cosham, Hants.

Class 480.—*Three Fleeces of Suffolk Wool.*

549 I. (£3.)—MAJOR-GEN. LORD TREOWEN, C.B., C.M.G., Llanover, Abergavenny.
550 II. (£2), & 551 III. (£1.)—R. WORSLEY-WORSWICK, Acton Round, Bridgnorth.
547 R. N.—T. W. GOODCHILD, The Change, Great Yeldham, Essex.

Class 481.—*Three Fleeces of Dorset Down Wool.*

553 I. (£3), & 554 II. (£2.)—LEONARD TORY, Turnworth, Blandford.
552 III. (£1.)—MRS. LIONEL DE ROTHSCHILD, Exbury, Southampton.

Class 482.—*Three Fleeces of Dorset Horn Wool.*

556 I. (£3), 557 II. (£2), & 555 III. (£1.)—R. B. VINCENT, Manor Farm, Waterson, Dorchester.

Class 483.—*Three Fleeces of Ryeland Wool.*

560 I. (£3), & 561 II. (£2.)—DAVID J. THOMAS, Talachddu, Brecon.
559 III. (£1.)—F. W. MORRIS, Brynderwen Llangasty, Talyllyn, Brecon.
558 R. N.—LT.-COL. G. D. HALE, Coston Manor, Aston-on-Clun.

Class 484.—*Three Fleeces of Kerry Hill (Wales) Wool.*

563 I. (£3.)—THOMAS JONES, Great Weston, Montgomery.
562 II. (£2.)—BEN ALDERSON, Glanmiheli, Kerry, Mont.
564 III. (£1.)—J. C. JONES, Graig, Llanfair, Welshpool.

Class 485.—*Three Fleeces of Lincoln Wool.*

572 I. (£3.)—THOMAS SPINK & SONS, Hunmanby, Yorks.
571 II. (£2.)—RAWNSLEY & TINDALL, Well Vale, Alford, and Park House., Louth.
568 III. (£1.)—F. DUGGLEBY, Dalton Holme, Beverley.
570 R. N.—CLIFFORD NICHOLSON, Horkstow Manor, Barton-on-Humber.

Class 486.—*Three Fleeces of Leicester Wool.*

574 I. (£3), & 575 III. (£1.)—GEORGE HARRISON, Gainford Hall, Darlington.
576 II. (£2.)—C. H. SIMPSON & SONS, Castle House, Hunmanby.

Class 487.—*Three Fleeces of Border Leicester Wool.*

577 I. (£3.)—WILLIAM DAVIDSON, East Learmouth, Cornhill-on-Tweed.

Class 488.—*Three Fleeces of Wensleydale Wool.*

578 I. (£3.)—JOHN W. GREENSIT, Holme-on-Swale, Thirsk.
581 II. (£2), & 580 III. (£1.)—JOHN A. WILLIS, Manor House, Carperby, Yorks.
579 R. N.—JOHN PERCIVAL, Easthouse, Carperby, Yorks.

Class 489.—*Three Fleeces of Kent or Romney Marsh Wool, from Rams of any age.*

584 I. (£3.)—L. H. and G. W. FINN, The Mall, Faversham.
583 II. (£2.)—ARTHUR FINN, Westbroke House, Lydd, Kent.
586 III. (£1.)—J. EGERTON QUESTED, The Firs, Cheriton, Kent.
585 R. N.—THE EARL OF GUILFORD, Waldershare Park, Dover.

Class 490.—*Three Fleeces of Kent or Romney Marsh Wool, from Ewe Tegs.*

588 I. (£3.)—L. H. and G. W. FINN, The Mall, Faversham.
590 II. (£2.)—J. EGERTON QUESTED, The Firs, Cheriton, Kent.
587 III. (£1.)—J. RAYNER BETTS, Greenhill Farm, Otham, Maidstone.

Class 491.—*Three Fleeces of Kent or Romney Marsh Wool, excluding Rams and Ewe Tegs.*

593 I. (£3), 592 II. (£2), & 591 III. (£1.)—L. H. and G. W. FINN, The Mall, Faversham.
595 R. N.—J. EGERTON QUESTED, The Firs, Cheriton, Kent.

Class 492.—*Three Fleeces of Exmoor Horn Wool.*

596 I. (£3), & 597 II. (£2.)—D. J. TAPP, Highercombe, Dulverton.

Class 493.—*Three Fleeces of Welsh Mountain Wool.*

608 I. (£3.)—J. K. WILLIAMSON, Derwen Hall, Corwen.
605 II. (£2.)—ROBERT IVOR ROBERTS, Dyserth Hall, Dyserth, Flint.
598 III. (£1.)—H. O. ELLIS, Tynhendre, Bangor.
602 R. N.—LT.-COL. E. W. GRIFFITH, D.S.O., Plasnewydd, Denbigh.

Class 494.—*Three Fleeces of Black Welsh Mountain Wool.*

612 I. (£3.)—MRS. MARGARET L. J. POWELL, Nanteos, Aberystwyth.
609 II. (£2.)—ALFRED E. W. DARBY, Adcote, Shrewsbury.
610 III. (£1), & 611 R.N.—MRS. F. H. T. JERVOISE, Herriard Park, Basingstoke.

POULTRY.

By "Cock," "Hen," "Gander," and "Goose," are meant birds hatched previous to January 1, 1925; and by "Cockerel" and "Pullet" are meant birds hatched in 1925.

The Prizes in each Class are as follows: First Prize, 40*s*. Second Prize, 30*s*. Third Prize, 20*s*. Fourth Prize, 10*s*. Fifth Prize, 5*s*.

Special Prizes were given in the Poultry Classes by the following Clubs: Dorking, Sussex, White Wyandotte, Columbian Wyandotte, Australorp, British Rhode Island Red, and Indian Runner Duck.

Class 495.—*Dorking Cocks.*

4 I. & Special.—Ralph Alty, Gravel Farm, Croston, Preston.
5 II. & 1 R. N.—A. J. Major, Ditton, Langley, Bucks.
2 III.—James W. Hall, Evening Hill, Cockermouth.
H. C.—3.

Class 496.—*Dorking Hens.*

13 I.—A. J. Major, Ditton, Langley, Bucks.
11 II.—Ralph Alty, Graven Farm, Croston, Preston.
10 III., 14 IV. & 6 R. N.—Alexander Mann, Broomhill Road, Keith.
H. C.—9. C.—7.

Class 497.—*Dorking Cockerels.*

18 I. & 16 III.—A. J. Major, Ditton, Langley, Bucks.
15 II.—Thomas Briden, Cononley, via Keighley.

Class 498.—*Dorking Pullets.*

19 I. & R. N. for Special.—Thomas Briden, Cononley, via Keighley.
22 II. & 20 III.—A. J. Major, Ditton, Langley, Bucks.

Class 499.—*Croad Langshan Cocks or Cockerels.*

23 I.—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal.
32 II.—Alfred Giddings, Hillcrest, Chapel-en-le-Frith.
30 III.—Lindley & Rogers, Gate House Farm, Hurstpierpoint.
25 IV.—E. A. Merckel, Kingswood Poultry Farm, Upper Warlingham.
33 R. N.—W. H. Mitchell, Elmdene, Kenilworth.
H.C.—28. C.—24.

Class 500.—*Croad Langshan Hens or Pullets.*

38 I.—Lindley & Rogers, Gate House Farm, Hurstpierpoint.
34 II. & 41 R. N.—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal.
35 III.—E. A. Merckel, Kingswood Poultry Farm, Upper Warlingham.
40 IV.—Edward Cocker, 101 Towngate, Leyland, Lancs.
H. C.—43. C.—36.

Class 501.—*Brahma or Cochin Cocks or Cockerels.*

45 I.—G. W. Henshall, The Hollies, Timperley, Cheshire.
44 II.—Lord Dewar, Homestall, East Grinstead.
47 III.—Col. R. S. Williamson, The Grange, Hednesford, Staffs.
53 IV.—H. Martin Wright, The Poplars, Great Shelford, Cambs.
48 R. N.—Mrs. Douglas Lambert, Beeston Hill, Leeds.
H. C.—51. C.—50.

Class 502.—*Brahma or Cochin Hens or Pullets.*

57 I. & 54 II.—Mrs. W. Thompson, Old Chilwell, Notts.
56 III.—T. A. Hargreaves, Bradda, 9 Norfolk Road, Lytham.

Class 503.—*Red Sussex Cocks.*

58 I. & Special & 63 II.—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
61 III.—James Russel, Mapleton, Four Elms, Edenbridge.
60 R. N.—Mrs. M. Marston, Highwoods, Whydown, Bexhill.
H. C.—59. C.—62.

Class 504.—*Red Sussex Hens.*

69 I. & 66 III.—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
68 II.—A. J. Falkenstein, Marsons Croft, Rotherfield.
65 R. N.—Francis D. Watson, Croftsbank, Thornton Hough, Birkenhead.
H. C.—67.

Class 505.—*Red Sussex Cockerels.*

72 **I.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
71 **II.**—James Russel, Mapleton, Four Elms, Edenbridge.
73 **III.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
70 **R. N.**—Mrs. M. Marston, Highwoods, Whydown, Bexhill.

Class 506.—*Red Sussex Pullets.*

75 **I. & R. N. for Special.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
78 **II.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
74 **III.**—Francis D. Watson, Croftsbank, Thornton Hough, Birkenhead.
77 **R. N.**—James Russel, Mapleton, Four Elms, Edenbridge.

Class 507.—*Light Sussex Cocks.*

81 **I.** & 87 **III.**—James Russel, Mapleton, Four Elms, Edenbridge.
79 **II.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
84 **IV.**—J. S. Worsley, The Cottage, Thornaby Village, Yorks.
90 **V.**—R. E. Briddon, Knowts Hall Farm, Riddings, Alfreton.
86 **R. N.**—T. Horton Jefferson, Wistaston Cottage, near Crewe.
H. C.—83. **C.**—89.

Class 508.—*Light Sussex Hens.*

92 **I.** & 102 **V.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
103 **II.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
101 **III.**—James Russel, Mapleton, Four Elms, Edenbridge.
100 **IV.**—T. Horton Jefferson, Wistaston Cottage, near Crewe.
97 **R. N.**—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal.
H. C.—96. **C.**—94.

Class 509.—*Light Sussex Cockerels.*

121 **I. & R. N. for Special and Cup** & 111 **R. N.**—James Russel, Mapleton, Four Elms, Edenbridge.
131 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
115 **III.**—Mrs. M. Marston, Highwoods, Whydown, Bexhill.
120 **IV.**—Desborough Dobson, Woodlea, Windermere Road, Haywards Heath.
128 **V.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
H. C.—126. **C.**—127.

Class 510.—*Light Sussex Pullets.*

153 **I. & Special and Cup,** & 138 **II.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
155 **III.**—Walter Gooderidge, The Bungalow, Wormald Green, Harrogate.
156 **IV.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
145 **V.**—James Russel, Mapleton, Four Elms, Edenbridge.
137 **R. N.**—Charles Hardy, Argos Hill, Rotherfield.
H. C.—142. **C.**—135.

Class 511.—*Speckled Sussex Cocks.*

160 **I. & Special.**—James Russel, Mapleton, Four Elms, Edenbridge.
169 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
164 **III.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
165 **IV.**—Thomas Brothers, 10 London Place, Oxford.
163 **R. N.**—T. Horton Jefferson, Wistaston Cottage, near Crewe.
H. C.—167. **C.**—166.

Class 512.—*Speckled Sussex Hens.*

171 **I.**—Capt. T. M. Whittaker, Pen-y-Bryn Farm, Portmadoc.
178 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
177 **III.**—E. G. Ryall, Grove Park, Tavistock.
174 **IV.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
172 **R. N.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
H. C.—170. **C.**—175.

Class 513.—*Speckled Sussex Cockerels.*

181 **I.** & 185 **III.**—James Russel, Mapleton, Four Elms, Edenbridge.
182 **II.**—Capt. T. M. Whittaker, Pen-y-Bryn Farm, Portmadoc.
183 **R. N.**—A. J. Falkenstein, Marsons Croft, Rotherfield.

Class 514.—*Speckled Sussex Pullets.*

194 **I. & R. N. for Special.**—D. W. Davies, Fields Farm, Llanymynech.
192 **II.**—A. J. Falkenstein, Marsons Croft, Rotherfield.
191 **III.**—Desborough Dobson, Woodlea, Windermere Road, Haywards Heath.
196 **IV.**—E. G. Ryall, Grove Park, Tavistock.
193 **R. N.**—T. Horton Jefferson, Wistaston Cottage, near Crewe.
H. C.—190. **C.**—187.

Class 515.—*Brown Sussex Cocks.*

197 **I. & Special**, 203 **II.**, & 199 **R. N.**—CHARLES HARDY, Argos Hill, Rotherfield.
200 **III.**—DESBOROUGH DOBSON, Woodlea, Windermere Road, Haywards Heath.
H. C.—201. **C.**—198.

Class 516.—*Brown Sussex Hens.*

204 **I.**—S. SNELSON, Mount Rose, Smallwood, Sandbach.
211 **II.**—DESBOROUGH DOBSON, Woodlea, Windermere Road, Haywards Heath.
206 **III.**—A. J. FALKENSTEIN, Marsons Croft, Rotherfield.
208 **IV.** & 205 **R. N.**—CHARLES HARDY, Argos Hill, Rotherfield.
H. C.—210. **C.**—209.

Class 517.—*Brown Sussex Cockerels.*

218 **I.**—BLAKSLEY & BLYTH, West Moors, Dorset.
216 **II.**—DESBOROUGH DOBSON, Woodlea, Windermere Road, Haywards Heath.
217 **III.**—CHARLES HARDY, Argos Hill, Rotherfield.
213 **R. N.**—JAMES RUSSEL, Mapleton, Four Elms, Edenbridge.

Class 518.—*Brown Sussex Pullets.*

219 **I. & R. N. for Special.**—JAMES RUSSEL, Mapleton, Four Elms, Edenbridge.
223 **II.**—MAJOR J. A. MORRISON, D.S.O., Basildon Park, Goring, Reading.
222 **III.**—A. J. FALKENSTEIN, Marsons Croft, Rotherfield.
220 **R. N.**—CHARLES HARDY, Argos Hill, Rotherfield.
H. C.—221. **C.**—224.

Class 519.—*White Wyandotte Cocks.*

225 **I.**—LORD DEWAR, Homestall, East Grinstead.
226 **II.** & 230 **R. N.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
227 **III.**—MISS A. H. GORDON BARRETT, The Mount Farm, Hedgerley Corner, Farnham Royal.

Class 520.—*White Wyandotte Hens.*

232 **I.**—LORD DEWAR, Homestall, East Grinstead.
234 **II.** & 239 **III.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
240 **IV.**—P. BOWKER, Ebor Poultry Yard, Sheerness East.
235 **R. N.**—WILFRED W. WOODWARD, Frome Valley Poultry Farm, Bishops Frome, Worcester.

Class 521.—*White Wyandotte Cockerels.*

248 **I. & Special**, & 241 **II. & R. N. for Special.**—LORD DEWAR, Homestall, East Grinstead.
250 **III.** & 244 **R. N.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
247 **IV.**—MISS A. H. GORDON BARRETT, The Mount Farm, Hedgerley Corner, Farnham Royal.
252 **V.**—B. R. IRONS, Edward Street, Dunstable.

Class 522.—*White Wyandotte Pullets.*

253 **I. & Special.**—LORD DEWAR, Homestall, East Grinstead.
256 **II. & R. N. for Special.**—T. P. BURWELL, Lidlington, Beds.
263 **III.**—B. R. IRONS, Edward Street, Dunstable.
261 **IV.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
260 **R. N.**—MATTHEW NEVISON, Nateby, Kirkby Stephen.

Class 523.—*Gold or Silver Laced Wyandotte Cocks or Cockerels.*

264 **I.** & 273 **II.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
271 **III.**—W. A. and R. F. SPENCER, Chelmscote, Brailes, Banbury.
268 **IV.**—WILFRED W. WOODWARD, Frome Valley Poultry Farm, Bishops Frome, Worcester.
267 **R. N.**—J. G. MORTEN, Pentrich, Derby.
H. C.—269. **C.**—272.

Class 524.—*Gold or Silver Laced Wyandotte Hens or Pullets.*

281 **I.**—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
276 **II.**—F. R. MASKERY, 58 St. Edward Street, Leek.
278 **III.**—HERBERT SPENSLEY, Oaks Farm, Menston, Leeds.
277 **R. N.**—CAPT. T. S. CHRISTIE, Wardrew, Gilsland, Carlisle.

Class 525.—*Columbian Wyandotte Cocks or Cockerels.*

284 **I. & Special.**—L. H. WACE, Kingsland Poultry Farm, Solway Ash, Bridport.
286 **II. & R. N. for Special.**—GEORGE TOMKIN, Marden, Kent.
285 **III.**—S. J. SHEPHERD, Roughton, Bridgnorth.
282 **R. N.**—J. W. GERRARD, Pownall Green, Over Tabley, Knutsford.

Class 526.—*Columbian Wyandotte Hens or Pullets.*

287 **I.**—R. P. PERCIVAL, Shuttington House, Tamworth.
294 **II.**—GEORGE TOMKIN, Marden, Kent.
291 **III.**—L. H. WACE, Kingsland Poultry Farm, Solway Ash, Bridport.
288 **IV.**—R. P. SWALES, 25 Newbridge Street, Wolverhampton.
293 **R. N.**—WILLIAM R. READHEAD, Lynwood, Hamborough, Yorks.

Class 527.—*Wyandotte Cocks or Cockerels, any other colour.*

303 **I.** & 300 **R. N.**—F. Vernon, Hewitt, White Lodge, Quorn, Loughborough.
297 **II.**—Robert Bell, Wetheral, Carlisle.
302 **III.**—Col. R. S. Williamson, The Grange, Hednesford, Staffs.

Class 528.—*Wyandotte Hens or Pullets, any other colour.*

306 **I.** & 309 **R. N.**—F. Vernon Hewitt, White Lodge, Quorn, Loughborough.
305 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
308 **III.**—J. A. Boardley, Slyne Road, Lancaster.

Class 529.—*Buff Orpington Cocks.*

312 **I.**—J. Brooks, Myrtle Poultry Farm, Irlam, Manchester.
313 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
310 **III.**—W. J. Golding, Bowens, Penshurst, Kent.
311 **R. N.**—Charles Hatton, Willaston Poultry Farm, Nantwich.

Class 530.—*Buff Orpington Hens.*

317 **I.**—S. Snelson, Mount Rose, Smallwood, Sandbach.
316 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
319 **III.**—J. Brooks, Myrtle Poultry Farm, Irlam, Manchester.
315 **R. N.**—W. J. Golding, Bowens, Penshurst, Kent.

Class 531.—*Black Orpington Cocks.*

321 **I.**—Joseph Lewis, Cote Brook, Tarporley.
322 **II.**—Fred Swindells, Diglake Farm, Buglawton, Cheshire.
326 **III.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
325 **R. N.**—Miss N. Shanks, Stetchworth, Newmarket.

Class 532.—*Black Orpington Hens.*

329 **I.**—Joseph Lewis, Cote Brook, Tarporley.
332 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
328 **III.**—George Dickson, Hollin Ridge, Wormald Green, Harrogate.
330 **R. N.**—Fred Swindells, Diglake Farm, Buglawton, Cheshire.

Class 533.—*Orpington Cocks, any other colour.*

334 **I.**—George Dickson, Hollin Ridge, Wormald Green, Harrogate.
337 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
336 **III.**—Harold Corrie, Heath House Farm, Lowfield Heath, Surrey.
335 **R. N.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.

Class 534.—*Orpington Hens, any other colour.*

342 **I.**—Lord Dewar, Homestall, East Grinstead.
340 **II.** & 344 **III.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
341 **R. N.**—Lieut.-Col. H. Watts, O.B.E., Haslington Hall, Crewe.

Class 535.—*Orpington Cockerels, any colour.*

345 **I.**—Joseph Lewis, Cote Brook, Tarporley.
346 **II.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
347 **III.**—A. Hammond Browne, 53 Norfolk Street, King's Lynn.
348 **R. N.**—T. W. and J. K. Frost, Bryntirion Poultry Farm, Deganwy.

Class 536.—*Orpington Pullets, any colour.*

353 **I.**—Joseph Lewis, Cote Brook, Tarporley.
349 **II.**—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
350 **III.**—Percy Tice, Mill Farm, Ingworth, Norwich.
352 **R. N.**—A. Hammond Browne, 53 Norfolk Street, King's Lynn.

Class 537.—*Australorp Cocks or Cockerels.*

354 **I. & Special.**—Lord Dewar, Homestall, East Grinstead.
364 **II. & R. N. for Special.**—Miss Catherine Gladstone, Manley Hall, Helsby, Cheshire.
360 **III.** & 365 **V.**—Capt. Mugliston, Lathom Grange, Lathom, Ormskirk.
366 **IV.**—Mrs. Wienholt, Howcaple Grange, Ross, Herefordshire.
359 **R. N.**—Arthur Levet, Cotswold Utility Poultry Farm, Henley.
H. C.—356. **C.**—357.

Class 538.—*Australorp Hens or Pullets.*

374 **I. & Special.**—Arthur Levet, Cotswold Utility Poultry Farm, Henley.
377 **II. & R. N. for Special,** & 369 **IV.**—H. Harold Lloyd, Offley Poultry Farm, Sandbach.
367 **III.**—Lord Dewar, Homestall, East Grinstead.
368 **V.**—Mrs. Ward-Jackson, Street Court, Kingsland.
370 **R. N.**—F. H. Hampshire, Upperthong, Holmfirth.
H. C.—376. **C.**—375.

Class 539.—*British Rhode Island Red Single Comb Cocks.*

387 I. & Special, & 392 II. & R. N. for Special.—S. Snelson, Mount Rose, Smallwood, Sandbach.
385 III.—George Scott, Peerless Poultry Farm, Mirfield.
384 IV.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
388 V.—Mrs. Geoffrey Spencer, Reedley, Woodgate, Bexhill.
391 R. N.—John Spencer, Market Place, Ashbourne.
H. C.—381, 386, 393. C.—380.

Class 540.—*British Rhode Island Red Single Comb Hens.*

398 I.—George Scott, Peerless Poultry Farm, Mirfield.
399 II. & 402 IV.—Mrs. Geoffrey Spencer, Reedley, Woodgate, Bexhill.
394 III.—Captain W. Jollans, M.C., Scotter, Gainsborough.
401 R. N.—S. Snelson, Mount Rose, Smallwood, Sandbach.
H. C.—396.

Class 541.—*British Rhode Island Red Single Comb Cockerels.*

406 I.—F. Shadwell Clerke, Hilltop, Butley, Prestbury.
411 II.—Job Grimshaw, Brook House Farm, Halsall, Ormskirk.
414 III.—J. Cavill, Bawtry Road, Wickersley, Rotherham.
409 IV. & 417 R. N.—S. Snelson, Mount Rose, Smallwood, Sandbach.
410 V.—Mrs. Geoffrey Spencer, Reedley, Woodgate, Bexhill.
H. C.—404, 413, 416. C.—407, 412.

Class 542.—*British Rhode Island Red Single Comb Pullets.*

426 I. & Special.—Frank Smith & Co., Orchard Poultry Yards, Hessay, York.
444 II. & R. N. for Special.—John Spencer, Market Place, Ashbourne.
421 III.—R. B. Hulton, Lynnhurst, Farington, Preston.
433 IV.—George Scott, Peerless Poultry Farm, Mirfield.
445 V.—S. Snelson, Mount Rose, Smallwood, Sandbach.
422 R. N.—Captain W. Jollans, M.C., Scotter, Gainsborough.
H. C.—420, 424, 425, 432, 436. C.—418, 419.

Class 543.—*British Rhode Island Red Rose Comb Cocks.*

446 I. & Special.—F. W. N. Goddard, Sun Street, Hitchin.
450 II.—A. J. Major, Ditton, Langley, Bucks.
452 III.—G. H. Muzzlewhite, Redlands, Tavistock.
447 R. N.—John Voyce, 3 Toleman Avenue, Bebington, Cheshire.
H. C.—448, 449.

Class 544.—*British Rhode Island Red Rose Comb Hens.*

454 I.—Joseph W. Beard, Skegby, Mansfield.
456 II.—G. H. Muzzlewhite, Redlands, Tavistock.
457 III.—John Spencer, Market Place, Ashbourne.
455 R. N.—Tom A. Scott & Co., The Trenches, Middle Green, Slough.
H. C.—453.

Class 545.—*British Rhode Island Red Rose Comb Cockerels.*

462 I.—John Spencer, Market Place, Ashbourne.
459 II.—Mrs. C. Colbeck, Boyle Hall, West Ardsley, Wakefield.
458 III.—Captain R. W. Abell, The Elms, Stapleton, Leicester.

Class 546.—*British Rhode Island Red Rose Comb Pullets.*

472 I. & R. N. for Special.—B. L. Bosanquet, Holmleigh, Dawlish.
468 II.—John Voyce, 3 Toleman Avenue, Bebington, Cheshire.
473 III.—John Spencer, Market Place, Ashbourne.
463 IV. & 469 R. N.—Joseph W. Beard, Skegby, Mansfield.
C.—465.

Class 547.—*Barred Plymouth Rock Cocks.*

479 I.—John Taylor, Heath Farm, Tiptree.
477 II.—E. Marshall, Hollyhurst, Lenton, Nottingham.
480 III.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
478 R. N.—W. R. Williams, Carnforth.
H. C.—476. C.—475.

Class 548.—*Barred Plymouth Rock Hens.*

487 I.—John Pennington, Heswall-on-Dee, Birkenhead.
485 II.—E. Marshall, Hollyhurst, Lenton, Nottingham.
486 III.—James Bateman, Milnthorpe.
488 R. N.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
H. C.—483.

Class 549.—*Barred Plymouth Rock Cockerels.*

492 I.—W. R. Williams, Carnforth.
494 II.—James Bateman, Milnthorpe.
493 III.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
489 IV.—Fred Carding, Greenlands, Market Drayton.
H. C.—495.

Class 550.—*Barred Plymouth Rock Pullets.*

500 I.—Fred Carding, Greenlands, Market Drayton.
502 II.—W. W. W. Butt, Eastfield Farm, North Thoresby, Lincs.
505 III.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
498 R. N.—James Lewis, 85 Church Street, Old Whittington, Chesterfield.
H. C.—503.

Class 551.—*Buff Plymouth Rock Cocks or Cockerels.*

515 I.—S. Snelson, Mount Rose, Smallwood, Sandbach.
511 II.—Abbot Brothers, Thuxton, Norfolk.
518 III.—A. C. Tattersall, Watlingford, Altrincham.
508 IV.—Arthur W. Godwin, 30 St. Edward Street, Leek.
506 V.—James Bateman, Milnthorpe.
514 R. N.—W. W. W. Butt, Eastfield Farm, North Thoresby, Lincs.
H. C.—516. C.—510.

Class 552.—*Buff Plymouth Rock Hens or Pullets.*

530 I. & 524 II.—A. C. Tattersall, Watlingford, Altrincham.
528 III.—Matthew Slater, Redwell Poultry Farm, Carnforth.
529 IV.—Arthur W. Godwin, 30 St. Edward Street, Leek.
523 R. N.—W. R. Abbey, Croft Farm, Hessay, York.
H. C.—527. C.—522.

Class 553.—*Plymouth Rock Cocks or Cockerels, any other colour.*

535 I.—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
531 II.—Fred North, Ainsdale, Southport.
533 III.—Tom Carr, Keswick House, Annan, N.B.

Class 554.—*Plymouth Rock Hens or Pullets, any other colour.*

537 I.—Lord Dewar, Homestall, East Grinstead.
538 II. & 543 R. N.—Matthew Slater, Redwell Poultry Farm, Carnforth.
541 III.—Dr. E. S. Jackson, Poultry Farm, Carnforth.
542 IV.—Tom Carr, Keswick House, Annan, N.B.

Class 555.—*Old English Game Black-Red Cocks or Cockerels.*

549 I.—David Owen, 13 Tylcha Wen, Tonyrefail, Glam.
550 II.—T. Magill, Newcastle, Co. Down, Ireland.
554 III. & 547 R. N.—Tom Woodcock, Burton Fen, Lincoln.
553 IV.—J. H. Baker & Sons, Windyash, Barnstaple.
H. C.—552. C.—555.

Class 556.—*Old English Game Clay or Wheaten Hens or Pullets.*

559 I.—Gordon Lee, Upbrooks, Clitheroe.
561 II.—J. H. Baker & Sons, Windyash, Barnstaple.
560 III.—Arthur Brown, The Old Hall, Heighington.
556 R. N.—A. W. Noton, Upper End, Peak Dale, Stockport.
H. C.—558. C.—557.

Class 557.—*Old English Game Cocks or Cockerels, any other colour.*

563 I.—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
575 II.—R. Watson, Home Farm, Bletchley Park, Bucks.
570 III.—William Telford, Breconside, Brampton, Cumberland.
572 IV.—R. B. Price, Briton, Rhayader, Radnorshire.
567 V.—Gordon Lee, Upbrooks, Clitheroe.
566 R. N.—Joseph Graves, Station House, Bullgill.
H. C.—573. C.—564.

Class 558.—*Old English Game Hens or Pullets, any other colour.*

576 I.—J. H. Baker & Sons, Windyash, Barnstaple.
578 II. & 584 III.—John Watson, Eden Mount, Kendal.
577 IV.—Joseph Graves, Station House, Bullgill.
580 R. N.—Gordon Lee, Upbrooks, Clitheroe.
H. C.—582. C.—583.

Class 559.—*Indian Game Cocks or Cockerels.*

596 **I.** & 589 **II.**—Richard Belcher, 9 Barrons Street, West Bromwich.
593 **III.**—George Faulkner, Rowton, Chester.
585 **IV.**—Lord Dewar, Homestall, East Grinstead.
597 **V.**—James Harris, Laurel Cottage, St. Martins, Oswestry.
586 **R. N.**—W. G. Brent, Warrens Park, Coads Green, Launceston.
H. C.—598. **C.**—591.

Class 560.—*Indian Game Hens or Pullets.*

604 **I.** & 611 **II.**—Richard Belcher, 9 Barrons Street, West Bromwich.
612 **III.**—J. H. Baker & Sons, Windyash, Barnstaple.
610 **IV.**—George Faulkner, Rowton, Chester.
603 **V.**—W. G. Brent, Warrens Park, Coads Green, Launceston.
602 **R. N.**—Abbot Brothers, Thuxton, Norfolk.
H. C.—600. **C.**—601.

Class 561.—*Minorca Cocks or Cockerels.*

613 **I.**—Lord Dewar, Homestall, East Grinstead.
617 **II.**—J. T. Farrar & Son, 64 St. George Street, Smethwick.
618 **III.**—Alfred Dodd, The Grove, Shavington, Crewe.
616 **R. N.**—S. E. Parker, 466 Bloxwich Road, Leamore, Walsall.
H. C.—614.

Class 562.—*Minorca Hens or Pullets.*

622 **I.** & 627 **R. N.**—Alfred Dodd, The Grove, Shavington, Crewe.
625 **II.**—John W. Lowe, 4 Queen's Street, Northfields, Stamford.
619 **III.**—Lord Dewar, Homestall, East Grinstead.
624 **IV.**—S. E. Parker, 466 Bloxwich Road, Leamore, Walsall.
H. C.—620. **C.**—626.

Class 563.—*White Leghorn Cocks or Cockerels.*

628 **I.**—Lord Dewar, Homestall, East Grinstead.
632 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
630 **III.**—Whitaker & Tootill, Great Ouseburn, Yorks.

Class 564.—*White Leghorn Hens or Pullets.*

633 **I.**—Lord Dewar, Homestall, East Grinstead.
641 **II.**—Thomas Brothers, 10 London Place, Oxford.
638 **III.**—A. H. Stanbury, Bradley House, Newton Abbot.
637 **IV.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
636 **R. N.**—Whitaker & Tootill, Great Ouseburn, Yorks.
H. C.—640. **C.**—635.

Class 565.—*Leghorn Cocks or Cockerels, any other colour.*

648 **I.**—Martin Nicholls, Station House, Warrington.
646 **II.**—Ernest Ll. Simon, Pembroke.
643 **III.**—Walter Hurst, South Terrace, Glossop.
650 **R. N.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
H. C.—647.

Class 566.—*Leghorn Hens or Pullets, any other colour.*

657 **I.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
651 **II.** & 656 **R. N.**—Walter Hurst, South Terrace, Glossop.
653 **III.**—W. Dean, jun., 7 Rimmers Avenue, Freshfield, Liverpool.
H. C.—655. **C.**—654.

Class 567.—*Ancona Cocks or Cockerels.*

665 **I.**—E. Newall, Gravel, Winsford, Cheshire.
666 **II.** & 661 **IV.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
664 **III.**—Henry Hartley, Seghole Cottage, Trawden Forest, Colne.
659 **R. N.**—Allen Heath, Moss Rose, Stanthorne, Middlewich.
H. C.—660. **C.**—663.

Class 568.—*Ancona Hens or Pullets.*

671 **I.**—Allen Heath, Moss Rose, Stanthorne, Middlewich.
670 **II.**—R. Anthony, Home Farm, Euxton, Chorley, Lancs.
676 **III.**—Frederick Scott, West Garth, Arnside, via Carnforth.
673 **IV.**—Henry Hartley, Seghole Cottage, Trawden Forest, Colne.
674 **R. N.**—E. Newall, Gravel, Winsford, Cheshire.
H. C.—672. **C.**—669.

Class 569.—*Campine Cocks or Cockerels.*

677 I.—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
679 II.—Lieut.-Comdr. Howard G. Nalder, Tangley Mere, Chilworth, Surrey.
681 III.—Lieut.-Col. W. G. Lucas, Beech Place, Stowmarket.
H. C.—680. C.—678.

Class 570.—*Campine Hens or Pullets.*

684 I.—Lieut.-Comdr. Howard G. Nalder, Tangley Mere, Chilworth, Surrey.
682 II.—Lionel Turner, The Old House, Lewes.
683 III. & 686 R. N.—Lieut.-Col. W. G. Lucas, Beech Place, Stowmarket.
H. C.—685.

Class 571.—*Sicilian Buttercup Cocks or Cockerels.*

689 I.—Lawrence A. Holmes, The Grove, Etwall, Derby.
691 II. & 695 R. N.—Tom A. Scott & Co., The Trenches, Middle Green, Slough.
688 III.—Mrs. C. Colbeck, Boyle Hall, West Ardsley, Wakefield.
693 IV.—Blakesley & Blyth, West Moors, Dorset.
H. C.—687. C.—692.

Class 572.—*Sicilian Buttercup Hens or Pullets.*

698 I. & 702 III.—Ernest James Gee, Hartley Grange, Longfield, Kent.
697 II.—Major J. A. Morrison, D.S.O., Basildon Park, Goring, Reading.
699 R. N.—Tom A. Scott & Co., The Trenches, Middle Green, Slough.
H. C.—696. C.—700.

Class 573.—*Cocks, any other distinct variety, Bantams excepted.*

714 I.—Joseph Lewis, Cote Brook, Tarporley. Old English Pheasant Fowl.
718 II.—R. Anthony, Home Farm, Euxton, Chorley. Hamburgh.
706 III.—J. H. Baker & Sons, Windyash, Barnstaple. Jubilee Indian Game.
711 IV.—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal. Silkie.
717 V.—Mrs. J. M. Walker, Oaklane Pedigree Poultry Farm, Newdigate, Surrey. Barnevelder.
704 R. N.—Lord Dewar, Homestall, East Grinstead. Modern Game.
H. C.—716. C.—709.

Class 574.—*Cockerels, any other distinct variety, Bantams excepted.*

721 I.—W. W. W. Butt, Eastfield Farm, North Thoresby. Salmon Faverolle.
720 II.—Thomas Hoyle, Savile Royd, Halifax. Black Hamburgh.
722 III.—Mrs. J. M. Walker, Oaklane Pedigree Poultry Farm, Newdigate, Surrey. Barnevelder.

Class 575.—*Hens, any other distinct variety, Bantams excepted.*

730 I.—Harry Fox, Richmond Poultry Farm, Matlock. Redcap.
726 II.—R. Anthony, Home Farm, Euxton, Chorley. Hamburgh.
735 III.—Joseph Pickerill, Sound Council School, Nantwich. Club-type Langshan.
732 IV.—J. H. Baker & Sons, Windyash, Barnstaple.
724 V.—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal. Silkie.
728 R. N.—Joe H. Spurry, The Cottage, Park View, Llanelly. Modern Game.
H. C.—734. C.—737.

Class 576.—*Pullets, any other distinct variety, Bantams excepted.*

743 I.—W. W. W. Butt, Eastfield Farm, North Thoresby. Salmon Faverolle.
741 II.—Miss A. H. Gordon Barrett, The Mount Farm, Hedgerley Corner, Farnham Royal. Silkie.
742 III.—Thomas Hoyle, Savile Royd, Halifax. Black Hamburgh.
745 R. N.—Blakesley & Blyth, West Moors, Dorset. White Bresse.
H. C.—746.

Class 577.—*Utility Poultry, White Wyandotte Cocks or Cockerels.*

749 I. & 756 III.—Richard Rodwell, Walverden Poultry Farm, Nelson.
758 II.—Mrs. Edith Sheppard, Chanticleer Poultry Farm, Wrexham.
750 IV.—Mrs. J. A. Harrop, Gwersyllt Hill, Wrexham.
762 V.—Miss E. G. Dobie, Willow Cottage, Mouldsworth, Chester.
763 R. N.—Arthur Snowden, Clayton Hall Poultry Farm, Crosshills, Yorks.
H. C.—759. C.—751.

Class 578.—*Utility Poultry, White Wyandotte Hens or Pullets.*

777 I.—Park House Poultry Farm, Horley, Surrey.
767 II.—C. N. Goode, Bletsoe, Bedford.
778 III.—Richard Rodwell, Walverden Poultry Farm, Nelson.
764 IV.—Lord Dewar, Homestall, East Grinstead.

771 **V.**—Isaac Ashton & Son, Fir Tree Farm, Dukinfield.
781 **R. N.**—J. T. Bosley, The Cottages, Liverpool Sanatorium, Frodsham.
H. C.—768. **C.**—769.

Class 579.—*Utility Poultry, White Leghorn Cocks or Cockerels.*

790 **I.**—Richard Rodwell, Walverden Poultry Farm, Nelson.
795 **II.**—Arthur Snowden, Clayton Hall Poultry Farm, Crosshills, Yorks.
791 **III.**—Miss E. G. Dobie, Willow Cottage, Mouldsworth, Chester.
789 **IV.**—Harry Whiteoak, The Grange Farm, Keldwick, Keighley.
788 **V.**—Mrs. J. A. Harrop, Gwersyllt Hill, Wrexham.
792 **R. N.**—Mrs. A. Richards & Sons, Statham Meadows Poultry Farm, Lynn.
H. C.—793. **C.**—787.

Class 580.—*Utility Poultry, White Leghorn Hens or Pullets.*

814 **I.**—Miss E. G. Dobie, Willow Cottage, Mouldsworth, Chester.
798 **II.**—Lord Dewar, Homestall, East Grinstead.
802 **III.** & 815 **IV.**—Richard Rodwell, Walverden Poultry Farm, Nelson.
811 **V.**—Mrs. J. A. Harrop, Gwersyllt Hill, Wrexham.
818 **R. N.**—Francis D. Watson, Croftsbank, Thornton Hough, Birkenhead.
H. C.—812. **C.**—810.

Class 581.—*Utility Poultry, British Rhode Island Red Cocks or Cockerels.*

836 **I.**—Thomas Atkinson, Croft Poultry Farm, Burton-in-Lonsdale, Carnforth.
828 **II.**—J. T. Bosley, The Cottages, Liverpool Sanatorium, Frodsham.
835 **III.**—C. Boote, 3 Victoria Road, Runcorn.
824 **IV.**—F. W. N. Goddard, Sun Street, Hitchin.
830 **V.**—Isaac Ashton & Son, Fir Tree Farm, Dukinfield.
823 **R. N.**—Miss M. K. Napier, Wellington Road Poultry Farm, Taunton.
H. C.—832. **C.**—821.

Class 582.—*Utility Poultry, British Rhode Island Red Hens or Pullets.*

843 **I.**—Thomas Hodgson & Son, Redsholme, Cotherstone, Darlington.
840 **II.**—Mrs. Edith Sheppard, Chanticleer Poultry Farm, Wrexham.
844 **III.**—J. T. Bosley, The Cottages, Liverpool Sanatorium, Frodsham.
846 **IV.**—G. Clapham, Bowbrook, Shrewsbury.
845 **R. N.**—Robert Howard, Millfield Poultry Farm, Lower Thingwall, Birkenhead.
H. C.—842. **C.**—841.

Class 583.—*Utility Poultry, Sussex Cocks or Cockerels, any colour.*

849 **I.**—C. N. Goode, Bletsoe, Bedford.
851 **II.**—G. and T. Rowe, Cowley Lodge, Buckingham.
850 **III.**—C. W. Cracknell, 257 Franklin Road, Kings Norton, Birmingham.

Class 584.—*Utility Poultry, Sussex Hens or Pullets, any colour.*

856 **I.**—C. N. Goode, Bletsoe, Bedford.
864 **II.**—C. W. Cracknell, 257 Franklin Road, Kings Norton, Birmingham.
852 **III.**—Lord Dewar, Homestall, East Grinstead.
853 **IV.**—Pryce E. Hughes, Gresty, Crewe.
854 **V.**—W. H. Brady, Glan-y-Coed, Penmaenmawr.
858 **R. N.**—Robert Howard, Millfield Poultry Farm, Lower Thingwall, Birkenhead.
H. C.—860. **C.**—863.

Class 585.—*Utility Poultry, Cocks or Cockerels, any other variety.*

867 **I.**—W. R. Abbey, Croft Farm, Hessay, York. Buff Plymouth Rock.
872 **II.**—Dr. E. S. Jackson, Poultry Farm, Carnforth.
870 **III.**—G. Clapham, Bowbrook, Shrewsbury. Ancona.
871 **R. N.**—Arthur Snowden, Clayton Hall Poultry Farm, Crosshills, Yorks. Barnevelder.
H. C.—869. **C.**—873.

Class 586.—*Utility Poultry, Hens or Pullets, any other variety.*

883 **I.**—Frederick Scott, West Garth, Arnside, Carnforth. Ancona.
878 **II.**—Richard Rodwell, Walverden Poultry Farm, Nelson.
874 **III.**—Lord Dewar, Homestall, East Grinstead. Black Orpington.
875 **IV.**—Mrs. J. M. Walker, Oaklane Pedigree Poultry Farm, Newdigate, Surrey. Barnevelder.
877 **R. N.**—Walter Hurst, South Terrace, Glossop. Black Leghorn.
H. C.—881. **C.**—879.

Class 587.—*Aylesbury Drakes or Ducks.*

887 **I.**—James Huntly & Son, Hirsel Poultry Farm, Coldstream.
886 **II.**—Mrs. A. H. Parry, Henblas, Llanerchymedd, Anglesey.
888 **III.**—The Rev. Joseph Hewetson, Burbage Vicarage, Buxton.
885 **R. N.**—C. S. Gamon, Thornton-le-Moors, Chester.
H. C.—891.

Class 588.—*Rouen Drakes or Ducks.*

892 I. & 900 III.—R. ANTHONY, Home Farm, Euxton, Chorley, Lancs.
898 II.—SAMUEL SPINKE, Park Farm, Stowting, Ashford, Kent.
895 IV.—JAMES HUNTLY & SON, Hirsel Poultry Farm, Coldstream.
894 R. N.—ARTHUR MOSFORD, Frog Lane Farm, Tattenhall, Chester.
H. C.—902. C.—893.

Class 589.—*Fawn Indian Runner Drakes or Ducks, bred prior to* 1925.

911 I. & Special.—E. H. LANG, Greenwood House, Wigton.
916 II. & Special.—JAMES R. SMITH, Netherholm House, Dumfries.
914 III. & R. N. for Special.—THE MISSES DAVIDSON and CHISHOLM, Cantray, Croy, Gollanfield, Inverness-shire.
908 IV. & R. N. for Special, & 913 V.—WILLIAM WOODMASS, Howard House, Gilsland, Carlisle.
H. C.—910. C.—906.

Class 590.—*Fawn Indian Runner Drakes or Ducks, bred in* 1925.

917 I.—E. H. LANG, Greenwood House, Wigton.
919 II.—REGINALD APPLEYARD, Brewsters, Ixworth, Suffolk.
920 III.—MISS ANNIE PERCIFULL, Beach Poultry Farm, Minehead.
921 R. N.—WILLIAM WOODMASS, Howard House, Gilsland, Carlisle.

Class 591.—*Indian Runner Drakes or Ducks, any other colour, bred prior to* 1925.

922 I., 924 III. & 925 R. N.—REGINALD APPLEYARD, Brewsters, Ixworth, Suffolk.
923 II.—E. H. LANG, Greenwood House, Wigton.

Class 592.—*Indian Runner Drakes or Ducks, any other colour, bred in* 1925.

926 I.—E. H. LANG, Greenwood House, Wigton.
930 II.—THE REV. JOSEPH HEWETSON, Burbage Vicarage, Buxton.
929 III.—REGINALD APPLEYARD, Brewsters, Ixworth, Suffolk.
928 R. N.—JAMES R. SMITH, Netherholm House, Dumfries.

Class 593.—*Buff Orpington Drakes or Ducks, bred prior to* 1925.

933 I.—JAMES HUNTLY & SON, Hirsel Poultry Farm, Coldstream.
934 II.—THOMAS UMPLEBY, Hillingdon, Primrose Hill, Jarrow-on-Tyne.
932 III.—COL. R. S. WILLIAMSON, The Grange, Hednesford, Staffs.

Class 594.—*Buff Orpington Drakes or Ducks, bred in* 1925.

938 I.—MRS. H. B. JOHNSON, Elloughton Castle, Brough.
935 II.—LIEUT.-COL. W. G. LUCAS, Beech Place, Stowmarket.
937 III.—JAMES HUNTLY & SON, Hirsel Poultry Farm, Coldstream.
936 R. N.—LIEUT.-COL. G. R. B. PATTEN, Glan Hafod, Penmain, Old Colwyn.

Class 595.—*Drakes, any other variety.*

946 I.—DR. A. BARRY SYKES, Ashhurst, Formby. Cayuga.
941 II.—LESLIE WEBB, Walton Leigh, Addlestone. Crested.
945 III.—JAMES LONGSON & SONS, Buxton Road, Chapel-en-le-Frith. Pekin.
943 R. N.—C. N. GOODE, Bletsoe, Bedford.
H. C.—940. C.—947.

Class 596.—*Ducks, any other variety.*

949 I.—ABBOT BROTHERS, Thuxton, Norfolk.
952 II.—DR. A. BARRY SYKES, Ashhurst, Formby. Cayuga.
950 III.—C. N. GOODE, Bletsoe, Bedford.
951 R. N.—JAMES LONGSON & SONS, Buxton Road, Chapel-en-le-Frith. Pekin.
H. C.—948.

Class 597.—*Embden Ganders or Geese.*

954 I.—ABBOT BROTHERS, Thuxton, Norfolk.
957 II.—EDWARD DICKIN, Pentrecoed, Ellesmere.
955 III.—REGINALD APPLEYARD, Brewsters, Ixworth, Suffolk.
956 R. N.—MRS. A. H. PARRY, Henblas, Llanerchymedd, Anglesey.
H. C.—959. C.—958.

Class 598.—*Toulouse Ganders or Geese.*

960 I.—ABBOT BROTHERS, Thuxton, Norfolk.
962 II.—W. G. WATSON, Rusper Road, Horsham.
961 III.—REGINALD APPLEYARD, Brewsters, Ixworth, Suffolk.

Class 599.—*Turkey Cocks.*

965 I.—ABBOT BROTHERS, Thuxton, Norfolk.
967 II.—HORACE WOOLLATT, Valley Farm, Codicote, Welwyn.
966 III. & 963 R. N.—LADY HARLECH, Brogyntyn, Oswestry.
H. C.—964.

Class 600.—*Turkey Hens.*

969 I.—Abbot Brothers, Thuxton, Norfolk.
970 II.—Horace Woollatt, Valley Farm, Codicote, Welwyn.
968 III.—Herbert Bennett, Turkey Farm, Braiseworth, Eye.

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Class 1.—*Groups of Miscellaneous Plants.*

1 I. (£45,[1] & G.M.[2])—James Cypher & Sons, Cheltenham.
2 II. (£40.)—W. A. Holmes, West End Nurseries, Chesterfield.
3 III. (£30.)—T. M. Petch, Highfield Nursery, Great Horton, Bradford.

Class 2.—*Collections of Orchids.*

5 I. (£12.)—Stuart Low & Co., Bush Hill Park, Enfield.
4 II. (£7.)—James Cypher & Sons, Cheltenham.

Class 3.—*Collections of Delphiniums.*

8 I. (£6, & G.M.[2])—Bees, Ltd., Sealand Nurseries, Chester.
6 II. (£4.)—Blackmore & Langdon, Twerton-on-Avon, Bath.

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9 I. (£30.)—Blackmore & Langdon, Twerton-on-Avon, Bath.

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10 I. (£15.)—Bees, Ltd., Sealand Nurseries, Chester.

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11 I. (£30.[1])—Bees, Ltd., Sealand Nurseries, Chester.
12 II. (£25.)—William Artindale & Son, Nether Green, Sheffield.
14 III. (£20.)—Gibson & Co., Leeming Bar, Bedale.
H. C.—13.

Class 7.—*Best Representations of Hardy Perennial Borders.*

15 I. (£25.)—Bees, Ltd., Sealand Nurseries, Chester.
16 II. (£20.)—William Artindale & Son, Nether Green, Sheffield.
17 III. (£15.)—Gibson & Co., Leeming Bar, Bedale.

Class 8.—*Collections of Cut Sprays of Tree Carnations.*

20 I. (£15.)—C. Engelmann, Ltd., Saffron Walden.
19 II. (£10.)—Stuart Low & Co., Bush Hill Park, Enfield.

Class 9.—*Collections of Cut Sprays of Border Carnations.*

21 I. (£15.)—H. Lakeman, Queensberry Nursery, Thornton Heath.

Class 10.—*Collections of Sweet Peas.*

23 I. (£15.)—Robert Bolton & Son, Birdbrook, Halstead.
24 II. (£10.)—E. W. King & Co., Coggeshall, Essex.
25 III. (£7.)—J. Stevenson, Wimborne, Dorset.

Class 11.—*Collections of Cut Roses.*

27 I. (£15.)—Bees, Ltd., Sealand Nurseries, Chester.
28 II. (£10.)—Thomas Robinson, Porchester Nurseries, Nottingham.
29 III. (£7.)—W. and J. Brown, Peterborough.
26 IV. (£5.)—A. J. Allen & Co., Bowthorpe Nurseries, Norwich.

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Robert Bolton & Son, Birdbrook, Halstead. Sweet Peas.
Alexander Dickson & Sons, Howlmark, Newtownards. Roses.
Kent & Brydon, Ltd., Darlington. Alpine Plants and Rockery.
Studley College, Studley, Warwickshire. Fruits.
Sutton & Sons, Reading. Vegetables, Fruit and Flowers.
Waterer, Sons & Crisp, Bagshot, Twyford. Shrubs and Examples of Topiary.

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[2] Gold Medal given by the Royal Botanical and Horticultural Society of Manchester and Northern Counties for an exhibit of special merit.

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H. LAKEMAN, Queensberry Nursery, Thornton Heath. Border Carnations.
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